

AMERICAN
RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

SATURDAY, MAY 7, 1859.

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NEW-YORK:

PUBLISHED WEEKLY, BY

JOHN H. SCHULTZ & CO.

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FLOORING OF RAILWAY BRIDGES, ETC.

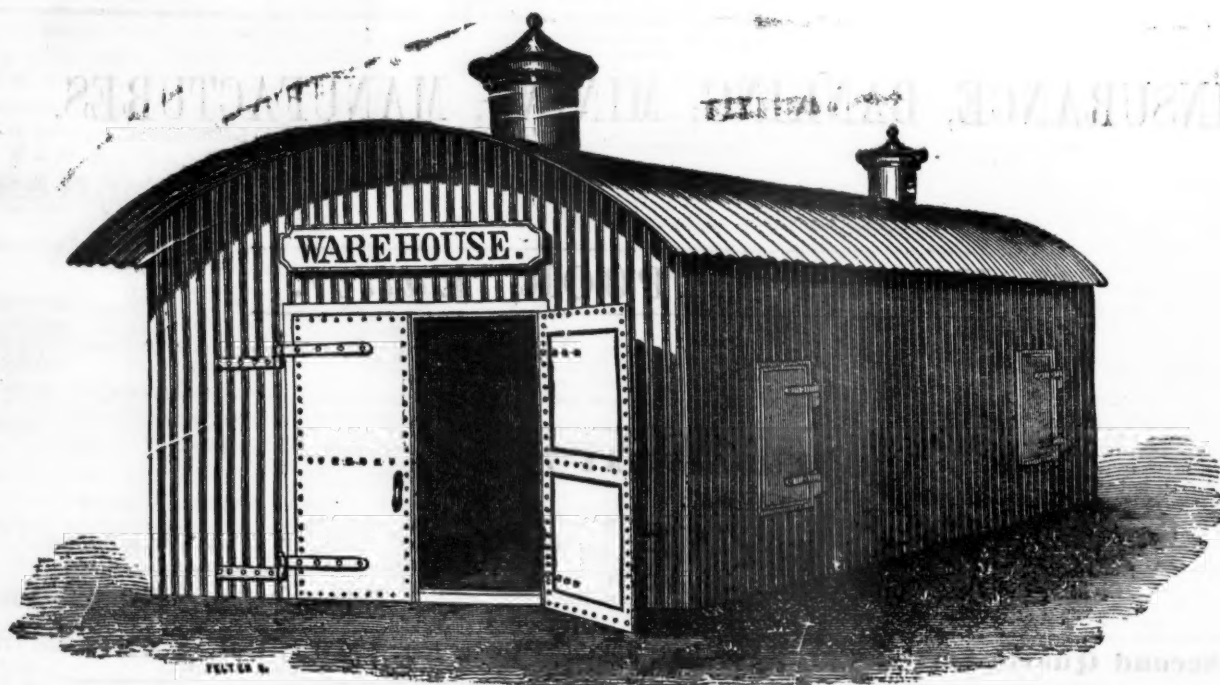
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SECOND QUARTO SERIES, VOL. XV., No. 19.]

SATURDAY, MAY 7, 1859.

[WHOLE No. 1,203, Vol. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, May 7, 1859.

Lehigh Coal and Navigation Company.

The annual meeting of the stockholders of this corporation, was held in Philadelphia, on the 3d. inst. The report of the board of managers was presented, of which the following is a synopsis: The shipments of coal were 908,999 tons, of which 114,537 tons were consumed on the line of the canal, 281,950 tons passed into the Morris Canal and 512,512 tons entered the Delaware Division Canal. The lumber trade was nearly thirty-six millions of feet. The freight of all descriptions, descending and ascending, was 1,126,760 tons. The profits of the year, \$595,856, against \$593,290 for the preceding year. The balance at the close of the year, \$343,863, against \$304,811 the end of 1857, being equal to nearly 14 per cent. on the capital stock. The contingent fund, the whole of which is securely invested, was, on the 1st of January last, \$1,099,889. Of the funded debt, \$301,416 were paid off, while the floating debt was reduced by the sum of \$53,561, making an aggregate reduction of \$354,977 in the general indebtedness of the company. At the close of the year 1858, the liabilities of the company, including the capital stock, funded debt and pecuniary obliga-

tions of every kind, and including also their own loans held in trust, subject to the orders of the board, were \$6,391,103. Deducting therefrom the last item, there remained \$6,057,243, as the sum total of the company's liabilities, showing a very decided improvement in the financial position of the company. Alluding to the material reductions made from the rates of toll on coal to tide, the report says results have justified the anticipations of the managers, the shipments to the present time being largely in advance of the shipments for the corresponding period of last year.

The officers elected for the ensuing year were:

President, JAMES COX.

Managers, Erskine Hazard, George Abbott, John Farnum, Henry J. Boller, Richard Richardson, Alexander Fullerton, Andrew Manderson, James S. Cox, Edward Yarnall and Jacob P. Jones.

Treasurer, EDWIN WALTER.

New London, Willimantic and Palmer R. R.

The income of this corporation from operations of their road during the fiscal year terminating November 1, 1858, was:

From passengers	\$42,297 68
" freight	53,194 19
" mail, express and rents	8,972 39
	\$104,464 26

The expenses for same time were:

Repairs of road, etc.	\$12,650 09
Do. engines & cars.	5,856 51
Conducting transportation, including salaries, etc.	24,038 34
Wood, coal, oil, etc.	11,088 29
Miscellaneous	3,602 23
	57,235 46

Net earnings	\$47,228 80
Paid for renewals and relaying super-structure	\$16,386 98
Interest on 7 per ct. bonds.	16,987 34
Do. city bonds	6,000 00
Do. mortgages	81 16
	39,445 48

Leaving a balance of.....\$7,773 32
A statement is given in the report, showing the receipts, expenses and interest paid during each of the nine years that the road has been in operation; the aggregate receipts have been \$1,013,529 23; the expenses, (including \$53,271 11 for construction and renewals) were \$594,573 82; the

interest paid \$413,605 10. The company has no floating debt. The current expenses of the road are paid punctually every month. There is one and a-half year's interest on the first mortgage bonds unpaid, besides three year's interest on the second and income bonds.

"The number of miles run by all the trains is 91,134, against 109,772 in 1857; the number of passengers carried, 77,409 against 92,147.

GENERAL STATEMENT.

Capital stock	\$510,900 00
Seven per cent. bonds	500,000 00
Six " " "	300,000 00
" " " income and con. bonds	152,000 00
" " " N. L. City "	100,000 00
Original mort. on W. Neck property ..	3,600 00
Unpaid accounts	271 91
Profit and Loss	8,375 39
	\$1,575,147 30
Cost of road and property	\$1,561,241 66
Norwich Junction	5,452 68
Uncollected accounts	1,871 08
Notes receivable	1,623 14
Materials on hand	1,989 83
Cash	2,968 90
	\$1,575,147 30

OFFICERS:

THOMAS W. WILLIAMS, *President*.

JOHN DICKINSON, *Treasurer*.

W. R. STORRS, *Superintendent*

Louisville and Nashville Railroad.

We learn from the *Bowling Green Gazette*, that the work on this road is progressing at that place as rapidly as the weather and other circumstances will admit. The track is laid south as far as Foster's farm, a distance of five or six miles, and with fair weather and a full corps of hands will be pushed forward at a rate of about half a mile per day.

East Tennessee and Georgia Railroad.

The following is a statement of the earnings of this road for the nine months ending March 31st, 1859:

Received from passengers	\$135,927 77
" " freight	86,950 18
" " mail service	16,600 00
	\$239,377 95
Estimate expenses chargeable to same ..	95,874 08

Approximate net earnings..\$143,503 87

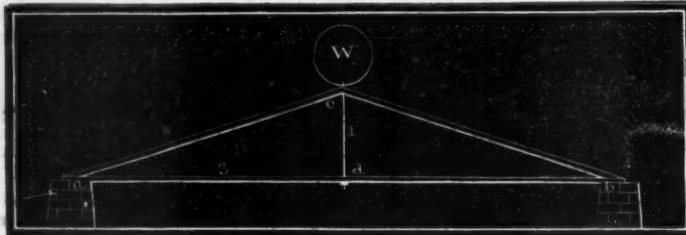
TREATISE ON THE PRINCIPLES OF CIVIL ENGINEERING AS APPLIED TO THE CONSTRUCTION OF WOODEN BRIDGES.

By S. S. POST, Civil Engineer,
And late Chief Engineer of the N. Y. & Erie R.R.

(Continued from p. 277.)

§ 80. The vertical pressures upon the abutments will, always, be equal to the weight; but the vertical strains upon the braces may much exceed that weight. The oblique strains, or those in the direction of the braces, will then be correspondingly increased.

Fig. 47.



ccc. Suppose the height of the truss (Fig. 47) to be one-sixth of the span. The weight (W) is supported at the middle by one pair of braces. These braces are $\sqrt{3^2+1^2}=3.162$ times the height, and if the weight (W) be taken at 10,000 lbs., the crushing tendency, in the direction of each brace, will be (§ 79, pp.) 15,810 lbs.

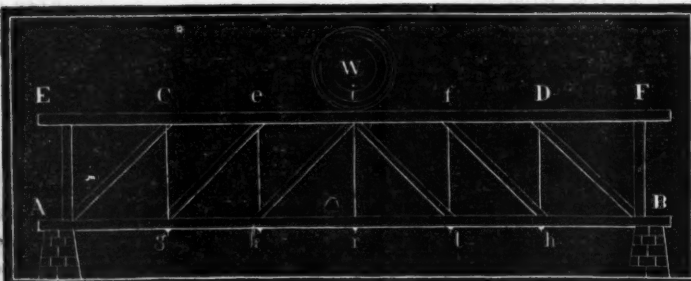
Now, if the chord be a white pine beam, 12 feet long, 12 inches deep and 6 inches in breadth, a deflection of $\frac{1}{20}$ of an inch, per foot, will be produced by 6,164 lbs. at the middle (§ 41).

By shortening the tie-rod (cd) $\frac{1}{20}$ or $\frac{1}{10}$ of an inch, producing a camber upon the chord to that extent, the braces will be subjected to an increased vertical strain of 6,164 lbs., and a total vertical pressure of 16 164 lbs. The force in the direction of the braces will now become 25,555 lbs.

The weight of the material composing a bridge, may be considered as weight uniformly distributed throughout the length of the trusses.

§ 81. It is customary in most forms of bridges, to extend the top chord to the same length as the bottom one, and to connect them firmly at the ends by means of posts, as represented in Fig. 48.

Fig. 48.

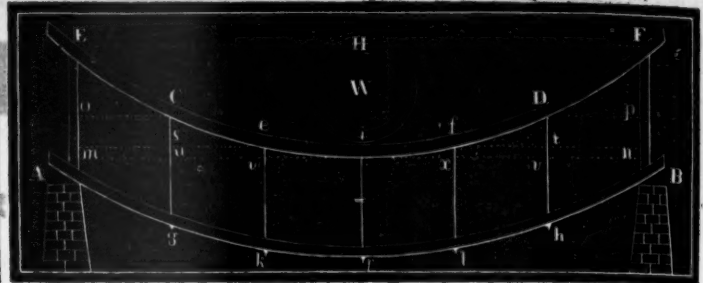


§ 82. Loading this truss uniformly, and observing the effect of flexure upon it, a tendency is seen to convert the rectangular panels into oblique-angled parallelograms.

This tendency is counter-acted by the oblique struts, and, being wholly vertical, may be measured by the reduction which will take place in the relative heights of opposite angles of the panels when the braces are omitted.

The greatest obliquity will occur in the end panels, and the least in the middle ones. The ratio of obliquity of the intermediate panels will depend upon the nature of the curve which the truss will assume. If the curve be regarded as a parabola, the obliquities will be as the squares of the distances from the middle, and are easily determined.

Fig. 49.



ddd. Let this figure represent the truss without its braces, and in a state of flexure conforming to a parabola. Put the depth of the truss equal $\frac{1}{6}$ its length, and the total deflection at the middle, $Hi=Em=Fn$.

The ordinates Fn , Dv and fx , will be as the squares of their distances from i , the middle of the truss.

Then $(im)^2 : Em :: (iu)^2 : Cu$; or, $3^2 : 1 :: 2^2 : \frac{4}{9} = Cu$, and

$(im)^2 : Em :: (iw)^2 : ew$; or, $3^2 : 1 :: 1^2 : \frac{1}{9} = ew$.

The difference in depression of

E and C will equal $Eo=Em-Cu=1-\frac{4}{9}=\frac{5}{9}$. Of

C and e " " $Cs=Cu-ew=\frac{4}{9}-\frac{1}{9}=\frac{3}{9}$. Of

e and i " " $ew=\frac{1}{9}$.

These depressions, then, are respectively as 5, 3 and 1, and exactly in proportion to the distances of the centres of the panels from the middle of the truss.

These numbers, therefore, express the relative oblique, and vertical pressures upon the three pairs of braces in Fig. 48.

The chords of trusses, except in § 80, have been considered as affected, only by tension or by compression. But, when the chords are composed of timber, either whole, or in pieces combined in any of the usual modes, each chord is a beam, the stiffness of which will, to a greater or less extent, oppose any tendency to deflection of the truss.

If the chords were perfectly stiff, no bending or curvature would take place. On the other hand if they were perfectly flexible a uniformly distributed load would give them the curvature of a parabola.

Loading the truss, Fig. 49, with a single weight in the middle, instead of uniformly distributing it, the tendency to convert the rectangular into oblique-angled panels, will still exist. If the chords were perfectly flexible an angle would be found at the point of application of the weight, the half-chords from that point would remain straight, and the obliquity would be the same in every panel; consequently, the braces would be of equal length and be subject to equal strains.

The chords, however, are neither perfectly stiff nor perfectly flexible, and when a considerable weight is applied at the middle of the truss, curvature does take place, unless the tendency to curvature is completely counteracted by the braces.

This curvature may be called the curve of flexure. If it were a parabola, the relative strains upon the braces would be the same as when the weight was uniformly distributed.

In the absence of well-authenticated experiments to prove the nature of this curve, it is assumed to be a hyperbola.

The hyperbola is a curve which may be said to vanish into two straight lines, forming an angle, and corresponding to the flexible chord; or, into one straight line corresponding to the perfectly inflexible chord. In a similar sense the ellipse vanishes into the circle as one diameter becomes equal to the other, or it vanishes into a straight line if one diameter becomes zero.

The deflection under a given load applied at the middle, is to the deflection produced by the same load uniformly distributed, as 8 to 5, (§ 48).

If the deflection (HI) of a truss (Fig. 49) under a distributed load, be 1, it will be $\frac{8}{5}=1.6$ under the same load applied at the middle.

Putting the half span (im) equal 3, as before; $rw=wu=um=1$; $HI=1.6$ and the curve an equilateral hyperbola, the depressions will be $ew=0.236$, $cs=0.59$, and $Eo=0.774$.

To show more clearly the relative distortions of the panels, when the load is distributed, and when it is at the middle, suppose two trusses in every respect alike, except, that one sustains a given load uniformly distributed, and the other sustains an equal load applied at the middle. Suppose, also,

that each truss consists of 36 panels; that their relative deflections are as 1 to 1.6; and for the purpose of avoiding fractions, suppose the deflection of one be divided into 324 parts, and of the other into 618.4 parts,—these numbers being to each other as 5 to 8. Beginning at the centre of each truss, and calculating the difference of depression for each panel, the following relations will be found to exist:

No. of panel	1.	2.	3.	4.	5.	6.	7.	8.
Truss uniformly loaded	1	+ 3	+ 5	+ 7	+ 9	+ 11	+ 13	+ 15
Truss loaded at middle	2.7	+ 8	+ 13	+ 17.4	+ 21.4	+ 24.8	+ 27.7	+ 30.2

9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
17	+ 19	+ 21	+ 23	+ 25	+ 27	+ 29	+ 31	+ 33	+ 35 = 324.
32.2	+ 33.9	+ 35.3	+ 36.5	+ 37.5	+ 38.3	+ 39	+ 39.7	+ 40.1	+ 40.7 = 518.4.

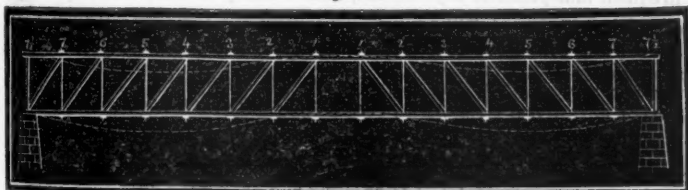
The effect will be similar if the load be applied at any intermediate point.

§ 83. From what has already been established, it may be inferred that in all cases the following propositions are true :

When a bridge is of uniform weight and its load is equally distributed the resulting forces will be as follows :

1. The vertical pressures upon the braces will increase as the distances from the centre of the truss, which will be *zero*, if the distance be taken to the middle point of the brace.
2. The oblique strains, or those in the direction of the braces and counter-braces, are proportionate to the vertical pressures, and will also increase directly as the distance from the middle of the truss.
3. The horizontal strain will be a maximum at the middle of the truss, and will diminish towards the ends.
- The strains resulting from the application of a load at any one point of the truss will be as follows :
 4. The vertical force will be inversely as the distances from the abutments.
 5. The oblique force, in the direction of the braces, will be proportionate to the vertical force, subject, however, to correction for the effect of the curve of flexure.
 6. The horizontal force will be as the rectangle of the segments of the truss, without regard to the number or inclination of the braces.
 7. In bridges of short spans the whole load may be considered as weight uniformly distributed over the entire length.

Fig. 50.



eee. This figure represents a truss with 15 panels. On the supposition that this truss weighs 15 tons the vertical strains upon the braces, will be, in tons, as indicated by the figures placed over the points of action. It is seen that the thrusts upon the end braces, in this case, are seven times greater than upon those nearest the centre. It follows that their sectional area, to resist compression proportionably, should be nearly seven times greater.

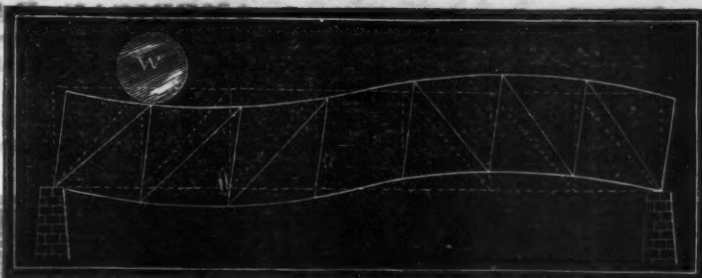
§ 84. When the truss is of great length, in comparison with its height, and the braces are disproportionate in size, the accumulating vertical strains towards the abutments, tend to produce great deflections of the chords, in the vicinity of the abutments, permanently distorting the truss, as indicated by the dotted lines in the last diagram *Fig. 50*.

The placing of an additional and undue load near one end of the structure, produces a tendency to raise it toward the opposite end. When the load is transferred to the other end a reverse action takes place: the alternate distortions thus produced, as soon as the elasticity of the material becomes impaired by such strains, leaves the truss with a deformed outline similar to that represented by the dotted lines in *Fig. 50*.

III. Referring to this figure (51) it will be noticed that the effect of a deflection under the weight (W) is to produce a motion of the end brace, inward, downward and around its lower extremity, upon the abutment as its fulcrum, with a radius equal to its length. This motion carries the top chord forward, toward the opposite abutment, causing the brace at that end to turn upward and outward.

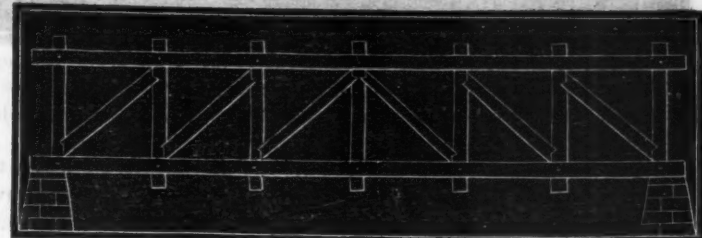
The dotted lines in the figure, show the position the truss is supposed to have occupied, before the application of the weight.

Fig. 51.



§ 85. The principles which have been explained, apply, equally, to all the different modes of construction, where parallel timbers form the top and bottom of the truss, whether the oblique and vertical forces act by tension or by thrust.

Fig. 52.



ggg. In the original form of parallel truss (*Fig. 52*) the vertical connections are made of timber posts, acting by tension. The oblique forces act by means of struts or wooden braces, abutting into, and thrusting against the posts.

Fig. 53.

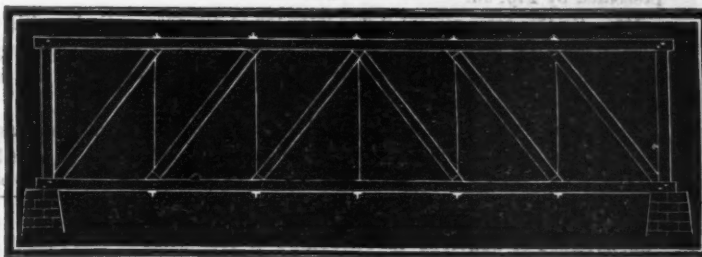
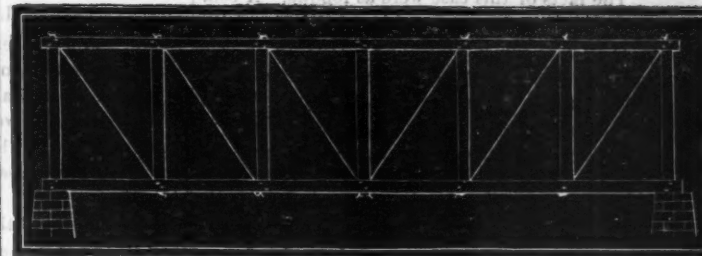


Abb. This figure represents the sustaining principles of the well known "Howe Truss" the counter-braces being omitted. The difference between this truss and the last described, is one of detail only; namely, in substituting iron rods for the wooden posts, except at the ends—and abutting the braces upon the chords, with, or without the intervention of bearing blocks.

It is apparent that the strength of this truss is the same as the other, provided the iron rods be made as strong as the posts, and the dimensions of the truss and size of the timbers are the same.

Fig. 54.



iii. This is a truss varying from the two last, in having the vertical connections made by wooden posts acting by thrust, abutting directly against the chords, and in having iron rods, acting by tension, placed in the diagonals opposite those occupied by braces in the other trusses.

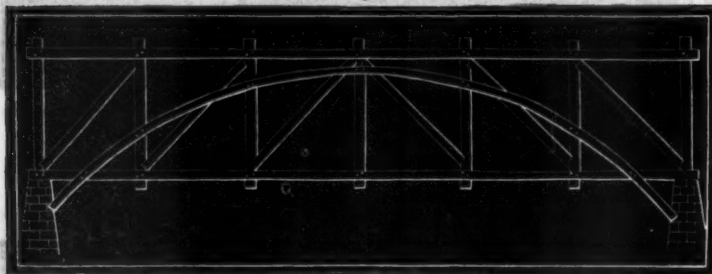
No special advantage appears to be gained by this arrangement. The strength is neither greater nor less than in the other cases, the height, length and other conditions being the same.

The peculiar office of the diagonals, in all these cases, is to furnish an ex-

pedient by which the resistance of the abutments is made to sustain the load wherever situated between the points of support.

It is demonstrable that with a given load, a minimum quantity of material will be required, when the diagonals have an inclination of 45 degrees.

Fig. 55.



kkk. Fig. 55 represents what is known as the "Burr Truss" it being a combination of the original truss (Fig. 52) with an arch, firmly secured to the sides of the truss, and abutting against the masonry considerably below the bridge seat.

This arrangement was in general use, on common roads, previous to the introduction of railroads; and, as a natural consequence in their construction, it was at first adopted, particularly for spans of considerable length. But the difficulty or impossibility of bringing a load to bear satisfactorily upon both truss and arch at the same time, and the extreme flexibility of the structure under the rapid transit of trains, tending to weaken its connections, and speedily destroying its integrity, have led in a great measure to its abandonment, and to the invention of the "Howe Truss" proper, as represented by Fig. 56.

lll. By this arrangement it was intended to dispense, entirely, with the use of the arch and to depend, alone, upon a truss of sufficient strength. For spans of a considerable length—say from 100 to 150 feet, it has met with fair success.

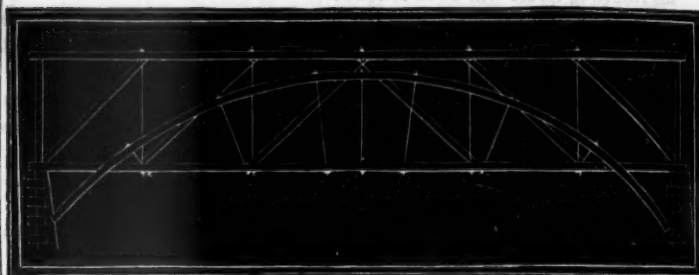
But, as the weight of locomotives and trains upon railroads have increased, and as spans of greater length have become desirable, this form of truss has

Fig. 56.



proved deficient, and the arch has again been brought into requisition, in attempted combination with this truss as shown in the next diagram.

Fig. 57.



mmm. In adopting this expedient it was thought that the arch and truss would act independently, and, at the same time, in unison with each other; that the lower chord being suspended, by adjustable rods from the arch, without the latter being fastened to the side of the truss, the strain would, always, be thrown equally upon the arch and the truss.

The variations in expansion and contraction, of the iron rods employed of different lengths, making constant adjustments necessary, and the liability to mal-treatment by careless or inexperienced persons in attempting the frequent indispensable adjustments, render this plan comparatively complicated and expensive, while it does not possess any practical advantage over the "Burr" arrangement.

(To be continued.)

Journal of Railroad Law.

EMPLOYMENT OF SERVICES IN PROCURING A CONTRACT FOR BUILDING A RAILROAD. WHEN VALID.

The case of *Davison vs. Seymour*, (in 1 Bosworth's N. Y. Superior Court Reports, recently published) discusses the important and interesting question, whether an agent employed to procure the contract for constructing a railroad from the company, for his principal, can recover from the principal a bonus or commission, agreed to be paid for his services, if successful.

The facts of this case were as follows. A company had been incorporated by the State of Illinois, to construct a railroad within that State. The plaintiff, Davison, was employed by Hezekiah C. Seymour, one of the firm of H. C. Seymour & Co. and acting on behalf of that firm, to procure for that firm contracts with the railroad company for constructing their road and for furnishing and equipping it. He was to have \$10,000 for his services. In consequence of his exertions and influence, the contracts were awarded to the firm of Seymour & Co., the total contract price for the work awarded to them being nine millions of dollars. That firm, however, instead of building the road, sold out their interest in the contract for five hundred thousand dollars bonus.

It further appeared that the plaintiff recommended Seymour to one Clements, who knew nothing of him. Clements recommended Seymour to the directors of the company, in consequence of plaintiff's attestation of his qualities. Clements was employed when the company was preparing to let the road, and was to have a good commission

which was afterwards adjusted at \$10,000. Clements engaged for these considerations to use his influence, and did use it to procure the contract for Seymour; and his exertions were successful; or at least influential in attaining the object. When Clements first undertook the matter, Davison did not even name to him the intended contractors, nor did he appear openly as Seymour's agent.

The court held that upon these facts, Davison could not recover the agreed compensation; such a contract being against public policy and therefore void. The following is a brief statement of the reasons assigned.

HOFFMAN J.—after stating the facts. Undoubtedly this was the employment of Clements for a bribe, to use personal influence with the directors to secure a lucrative contract for one, of whose capacity or responsibility he was entirely ignorant. He was to use this secretly and with individuals.

The directors of this great railroad scheme, if they stood not in the capacity of public officers, owing a duty to the State, yet were trustees of the stockholders of the road and owed the best efforts to them. No one can deny, that a stipulation for any personal advantage or profit which might attend and influence the discharge of their trust to the stockholders, would be a violation of duty; and no engagement given to them, or contract made with them for that object, could bear the scrutiny of the law. If one of their officers, empowered to negotiate and finally to settle the contract with Seymour, had received an obligation for the payment of a sum of money for his ser-

vices, it could never have been enforced. Does the present case fall within the principle which would avoid such agreements.

[After citing and examining numerous authorities bearing upon this question, his Honor proceeds as follows.]

I am led to the conclusion, that it would be impossible to allow Clements to sustain an action upon the agreement with him. There was in it most of those elements of a vicious contract, which have avoided similar obligations in the leading cases cited. There were secrecy, applications to individuals, a concealed promise of compensation, and utter ignorance and recklessness as to the competency of the party whose cause he was promoting, and whose reward he was to receive.

If, then, the claim of Clements would be promptly rejected, does the present plaintiff stand in a better position? His original employment might have been consistent with an open avowed agency—with an intent, or instructions, to make it known; and thus be free from all objection. But we are left in ignorance of what the terms of such original agreement were, and how far they extended. All is indefinite, except merely an employment. He engages Clements; and here again that employment may have been perfectly free from censure on the plaintiff's part. But we cannot separate the acts of Clements from the acts of the plaintiff. There is a legal identity between them for the purpose of this action. The plaintiff must be held to have employed Clements to do what he did do, or to have been bound to superintend his

proceedings, and free them from what was illegal. It is impossible to permit him to profit by the misdeeds of his own agent, however ignorant and exempt from them himself. His ignorance, when knowledge was a duty, becomes equivalent to a fault.

New York and Erie Railroad Circular.

We have been requested to publish the following circular in reference to the unsecured indebtedness of the New York and Erie railroad:—

The finances of the New York and Erie Railroad Company have become too cloudy for the public to comprehend, or the stockholders and unsecured bondholders to judge of the proper course to pursue in protecting their own interest, or by concert of action to restore former values. Therefore the writer submits the following remarks for perusal.

The policy of not renewing the bonds which fell due in March last, which could only be done at an enormous sacrifice, will be more justly appreciated at some future day, when the results will be more palpable. A part of the increased debt of latter years has arisen from the enormous sums paid for funding floating debts, as in previous years from renewing matured loans. If we take as view of the earnings and expenses of the last four years we shall find a large portion of the surplus earnings was expended on the Long Dock Investment, which will eventually prove to be the salvation of the company, as when all the works are completed, the company's revenue must be greatly increased.

In 1855 the earnings were.....	\$5,488,093	37
In 1856 the earnings were.....	6,348,990	15
In 1857 the earnings were.....	5,742,606	51
In 1858 the earnings were.....	5,151,606	43
In 1855 the expenses were.....	\$2,861,875	21
In 1856 the expenses were.....	3,201,996	42
In 1857 the expenses were.....	4,054,631	35
In 1858 the expenses were.....	3,871,908	69
Four years' interest on total debt.....	7,840,000	00
Surplus.....	\$901,794	79

This surplus represents the amount expended on the Long Dock property at Jersey City.

The present amount of bonds issued, secured by mortgages, are \$17,000,000, and of the unsecured \$8,000,000, (with convertible stock privileges) and balance \$11,000,000 representing the capital stock.

The progress of the company's business is seen strikingly in the following table:

	Passenger business or number carried per mile.	Freight business or tons carried per mile.
1850.....	26,224,147	17,536,090
1851.....	52,213,002	34,790,480
1852.....	81,179,554	96,697,695
1853.....	98,432,361	101,626,522
1854.....	96,663,709	130,808,034
1855.....	84,069,398	150,673,997
1856.....	101,108,220	183,458,043
1857.....	85,362,657	165,100,850
1858.....	64,981,456	165,895,635

The entire indebtedness of the company was on the 30th September, 1854, \$25,126,282 95, but had increased by the 30th of September, 1858, to \$26,386,952 80, showing an increase of \$1,260,669 85 in four years, which represents the loss of \$800,000 in 1855 in funding the income bonds and floating debt, and the balance charges on construction account.

It is worthy of remark that the expense of

wood per cord and the total cost per mile are less than on the New York Central or on the Hudson River railroads, also the shortest distance by 12 miles to Buffalo. The grade of track of the Erie is also more favorable for business than those of the Pennsylvania or the Baltimore roads. The Erie railroad possesses also other advantages in the steady increase of the products of the fields and the forests along its track. The annual increase of freight alone from this source is very great. The year 1858 showed a falling off in the passenger business alone, and none at all in the freight, and the decrease in 1857 arose from accidental and temporary causes well known, by which the whole country and all interests suffered, and from which they are now rapidly recovering. The New York Central has had for all the time of its existence a dense population to draw revenue from, but the Erie road has had a business to build up; and having no canal running parallel with it, will continue to have an exclusive monopoly of the annual increased local freights. It has been the means of bringing extensive fields into cultivation for agricultural purposes, and brought forests within reach of a market for their timber. These results are progressing constantly. With its air line of iron reaching from the ocean to the lakes of the interior, transporting and interchanging the commerce of the East and West, no limit can be assigned to the future earnings of this national thoroughfare. It is the natural outlet for the transportation of the millions of produce from the millions of acres lying on the borders of our upper Western lakes, yet only partially brought under the plough. The annual increase of population will create a great additional traffic, and the wants of this industrial population, yearly adding largely to its wealth, must cause a large increase of freight, carrying upwards the handiwork of nations and the luxuries imported from abroad, the products of every soil and clime, and bringing down the grain, the timber, the beef, the pork, the mutton, the wool, the cattle, which the teeming earth has been made instrumental in producing.

Economy of management is more essential now than ever, as one means of restoring the finances of the road. The express trains should be discontinued, and only two passenger trains each way per day be run, and these only at a rate of speed not exceeding twenty miles per hour. This would permit the track, the engines and the cars to be kept in good repair at a much reduced cost. The increase of friction and wasteful wear and tear, arising from an undue speed, such as is at present used, would be avoided. The race is not to the swift nor the battle to the strong; and this has been proved in many a railroad enterprise. Tact and wisdom are far more essential provisions for success than mere speed and strength. The cost of great speed cannot be repaid by the amount of business done. The safety also from a moderate speed saves much expense from accidents and damages incurred, which always attend great speed. The through passenger receipts are about three hundred thousand dollars, the through freight receipts about two millions of dollars, and the balance of receipts, from three to four millions, is made up from the local passenger and freight business. All railroad property represents mechanical labor and mechanism. The owners should have directors and officers of competent mechanical skill, and with honesty branded on their antecedent acts. The conductors, superintendents, and even laborers, should be in proper degrees skilled to keep the road in perfect order, as the mechanism of a good watch we carry in our pockets. The running of trains at a moderate or slow speed gives larger profits out of the receipts, and quick trains do not add to the net receipts out of the expenses. Probably fifty to sixty per cent. profit might be obtained, whereby only twenty or thirty per cent is now realized, from a less destructive speed being substituted for the present costly rate. It is not only the expense of steam but the waste from the destruction of property.

Express trains on railroads are about as profitable

to the stockholders as the merchants' trotting horses and carriages are when compared with the draft horses and carts at the warehouses. Therefore speed in both instances are alike destructive and ruinous, unless the amount of profitable business justifies the extra expense. In a word, the local business and through freight receipts are the only reliable sources to derive revenue and profit from.

The public now look upon railroad investments with the same kind of dread as they did upon mercantile notes and obligations in the panic month of 1857. If business prospers generally, railroads must prosper—as the passenger cars are used as hotels, and freight cars as warehouses to an extent only measured by the amount of business done by our domestic and foreign commerce. And the iron rails are not only extended arms for carrying merchandise etc., but ploughs for extending the culture of fields, the produce of which they bring within reach of market. The progress we have made in the last ten years, in the uses and adaptations of machinery, must convince all reflecting minds that if financial and mechanical ideas are not combined, the two motive powers of gold and coal are only used and wasted at the expense of the railroad stockholders. The owners of the Erie railroad must, we think, have become fully convinced, that the only legitimate sources from which profitable receipts are to be derived, is first from freights and local passenger traffic, and secondly to lessen the expense or cost of transport, by diminishing the friction and speed, saving consumption of steam and fuel, keeping down the wear and tear, and so lessening the cost of repairs. The cost of extreme speed is great, while not a portion of revenue in business is obtained thereby, and if a small increase were obtained it would not repay the increased outlay. The true policy is, therefore, to run all the trains slowly, and to keep the track and machinery in perfect order.—The through passenger receipts are mere shadows of profit, reflecting out the loss in transporting the substance, that is the balance of the business.—Now that we have ceased to be a nation of floating speculators in unproductive lands, for the panic has done one good thing in clearing out all moonshine or bogus ventures, we find that agricultural industry, and manufacturing industry excite more attention; and the revival of these will soon provide increased freight for our railroads, which are a permanent addition to the wealth of the nation.

The Erie railroad is a necessary outlet for the trade and commerce of New York. The merchants and traders subscribed liberally at first to the capital stock, in order to increase their trade by opening up large tracts of land for culture, and to connect the vast interior of the Western States directly with New York. On the completion of the Long Dock at Jersey City, the Erie railroad company will be able to control the through freighting business by having there provided warehouses, and cattle yards, for the storing of railroad receipts of merchandise and live stock for safe keeping; either for shipment to foreign ports, or a better home market. The writer is fully satisfied, on a thorough investigation, that the funded securities of the Erie railroad company are unduly depressed, arising from the large floating debt from the abuse of its former credits in the shape of acceptances, and the past villainous management of all railroad corporations.—Therefore now is the time for the stockholders, and others who may be interested, to purchase the unsecured bonds, which can be bought at a large discount, on which a large profit is certain to be soon derived by conversion into the fourth mortgage bonds, and will relieve the company of its embarrassment, which as the road works on, will regain its old commanding position. The fourth mortgage bonds are well secured; being purchasable to the extent of one-half by the unsecured bonds, these last are rendered valuable; and when the panic respecting railroad investments passes away, and the public recovers from its present torpor respecting them, they must bear a price commensurate with their real value. Also

the efforts of those persons to sustain this present original corporation, will feel amply rewarded for their labors in protecting their own property in common with others, in preventing this great and necessary work of art from passing into the hands of those whose fortunes will be made at our expense.

On reflection, you will come to but one conclusion, and that is: that while the general business of the United States is depressed, that the laws of trade "supply and demand," produce excessive competition followed by low rates on the through passenger and freight business, and that the profits only are derived from the local business of the road, and that even the present receipts from that source alone, is a sufficient guarantee that if the company's obligations were funded, that interest could be promptly paid on a much larger mortgage debt.

In giving the following figures (of the average for the past four years) from the official reports of the two most speculative English railways on the London Stock Exchange, and the two largest American railroad corporations on the New York Stock Exchange, we find the following startling results in favor of our roads.

American Rail-roads.	Miles.	Cost per mile.	Average annual receipts.	Present price of stock.
N. Y. & Erie....	460	80,000	5,700,000	
N. Y. Central....	300	133,000	7,000,000	
English Rail-roads.				
Great Western....	466	250,000	7,500,000	57 1/2
Midland.....	614	170,000	8,500,000	100 1/2

The writer now hopes that after presenting the above figures and truthful remarks, showing the ability of the road to derive a larger annual revenue, based on the shortest existing route to Lake Erie from New York, and representing less capital, a good grade, cheap fuel, yearly increase of production, traffic and population, now urges the immediate subscription to the balance of the fourth mortgage bonds, of which over two millions of dollars remain untaken. All persons wishing to subscribe, conditionally on the whole being taken, (which will immediately advance the market price twenty per cent.,) and on the terms proposed by the directors, namely, half payable in cash, or in the company's acceptances, and half in the unsecured bonds or coupons, will please forward their names by letter (postage paid) to

WASHINGTON MILLS,

43 Exchange Place, New York.

New York, April 25, 1859.

Texas Railroads.

The Galveston and Houston road now runs tri-weekly trains from Virginia Point to Houston merely for freighting purposes. We note but few passengers yet coming over the road. The bridge across the bay is being built as fast as possible. It is said that a thousand feet of it is already done. The Brazoria road is doing a regular business to Arcola, and has brought in several good loads of sugar, cotton and molasses within the past week. The grading is being pushed rapidly ahead beyond Columbia, and fully five miles of it is already done, as well as the timbers for the bridges and culverts on the ground.

The R. B., B. and C. road is at present stopping on the Bernard river, though we are informed the bridge will now very soon be done, when it will be pushed ahead fifteen miles further with all convenient speed. We learn that the directors of the W. C. road have contracted for their bridge across the Brazos. The contractors on the Central road are pushing their work through with heavy gangs of laborers, and expect to come within the terms of their contract. Other enterprises are quietly working along, among which we mention that of the New Orleans road, concerning which we shall very soon be able to publish some very satisfactory news, wind and tide permitting.—*Houston Telegraph.*

Richmond Machinery.

A few days since the barque William Mason, sailed from Richmond for New Orleans with nineteen steam engines and saw mills on board, all the manufacture of Richmond machine shops—fifteen of them being from Mr. P. Rahm's, three from Messrs Talbott's and one from Messrs. Anderson and Co's. The saws were also made in Richmond by Messrs. Burger & Boyle. The cargo of the barque was completed with bar iron from the rolling mills of Messrs. Anderson & Co.

This is the fifth vessel that has left our wharves for New Orleans within the last few months, loaded from our machine shops.

The demand upon Richmond from the farther South is not confined to saw mills, but includes every kind of machinery made in our establishments.

Very extended preparations have been made by several of our establishments in this line to do a large business, and to enable them to fill promptly any orders committed to them.—*Richmond Enquirer.*

Immigration into the United States.

The following statement will show the annual migration from foreign countries into the United States, from the foundation of the Government to the present times, and the sex and nationalities of the emigrants.

PROGRESS OF IMMIGRATION.

Arrivals from 1790 to 1843.

Years.	Arrivals.	Years.	Arrivals.
1790 to 1800..	50,000	1830-31.....	23,074
1800 to 1810..	70,000	1831-32.....	45,278
1810 to 1820..	114,000	1832-33.....	56,547
1820-21.....	5,993	1833-34.....	65,335
1821-22.....	7,329	1834-35.....	52,899
1822-23.....	6,749	1835-36.....	62,473
1823-24.....	7,088	1836-37.....	78,083
1824-25.....	8,532	1837-38.....	59,363
1825-26.....	10,151	1838-39.....	52,163
1826-27.....	12,418	1839-40.....	84,146
1827-28.....	26,114	1840-41.....	83,504
1828-29.....	24,459	1841-42.....	101,107
1829-30.....	27,153	1842-43.....	75,159
Total 1790-1843.....	1,209,126		

Arrivals from 1843 to 1858.

	No. of Males.	No. of Females.	Sex not stated.	Total Arrivals.
30.Sept.,1844..	48,897	35,867	...	84,764
" 1845..	69,179	49,311	1,406	119,896
" 1846..	90,974	66,778	897	158,649
" 1847..	139,167	99,353	990	239,482
" 1848..	136,128	92,883	472	229,483
" 1849..	179,256	119,915	512	299,683
" 1850..	200,904	113,892	1,038	315,234
8 m'ths, 1850..	38,282	27,197	181	65,570
31.Dec., 1851..	245,017	163,745	66	408,828
" 1852..	235,731	160,174	1,438	397,343
" 1853..	236,732	164,178	72	400,982
" 1854..	234,887	175,587	...	410,474
" 1855..	140,181	90,283	12	230,476
" 1856..	135,308	89,188	...	224,496
" 1857..	162,538	109,020	...	271,558
" 1858..	89,648	54,704	300	144,652
Total...2,432,829	1,611,457	7,884	4,051,670	
Total from 1790 to 1843.....	1,209,126			

GRAND TOTAL from 1790 to 1858..5,260,796

ORIGIN OF IMMIGRANTS, 1820-1850.

(Exclusive of Americans returned from abroad.)			
Countries.	1820	1836	Total
to 1850.	1850.	1850.	In U. S. Census of 1850.
England...	21,595	33,945	55,540
Wales.....	347	1,269	1,616
Scotland...	5,658	3,901	9,559
Ireland....	50,304	168,322	218,626
Not stated..	108,862	1,019,078	1,127,940
U.Kingd...	186,266	1,226,515	1,412,781
			1,340,812

France.....	26,688	105,076	131,714	54,069
Spain.....	3,565	43,885	6,950	3,113
Portugal....	891	668	1,559	1,274
Belgium....	33	5,091	5,124	1,318
Prussia.....	433	16,092	16,525	10,549
Germany....	52,868	525,396	578,264	574,171
Holland....	1,757	9,036	10,790	9,848
Denmark....	467	1,824	1,791	1,838
Swed. & Nor.	509	14,689	15,198	16,237
Poland.....	164	331	495	See Russia.
Russia.....	325	592	917	1,414
Turkey.....	23	64	87	106
Switzerland.	6,020	6,702	12,722	13,358
Greece.....	29	56	85	86
Italy & Malta	2,339	2,336	4,675	2,679

Other Countries of Continental Europe.....	2	51	53
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Total Conti't.	96,063	690,886	786,949	691,055
B.America..	6,677	51,156	57,833	147,711
S.America..	1,004	3,973	4,977	1,543
Cent' Amer.	147	372	519	141
Mexico.....	9,033	5,655	14,688	13,317
West Indies.	9,528	20,299	29,827	3,772

Tot.America,	26,389	81,455	107,844	168,484
Asia.....	46	99	145	1,135
Africa and Oceanica.	546	500	1,046	1,139
All other...	8,214

Tot.Asia, etc.	592	599	1,191	10,488
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Recapitulation, 1820-1850.

U. King'm.	186,266	1,226,515	1,412,781	1,340,812
Continent ..	96,063	690,886	786,949	691,055
Europe.....	282,329	1,917,401	2,199,730	2,031,867
America....	26,389	81,455	107,844	168,484
Asia, etc. ..	592	599	1,191	10,488

Grand Tot.,	309,310	1,999,455	2,308,765	2,210,839
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The total immigration of aliens to the end of 1858 has been:

Countries.	to 1850.	to 1858.	to 1858.
England.....	55,540	220,298	275,838
Wales.....	1,616	5,377	6,993
Scotland.....	9,559	34,425	43,984
Ireland.....	218,626	664,887	883,513
Unclassed....	1,127,440	273,353	1,400,793

United King'm,	1,412,781	1,198,340	2,611,121
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France.....	131,714	63,818	195,532
Spain.....	6,950	6,983	13,933
Portugal.....	1,559	887	2,446
Belgium.....	5,124	4,664	9,788
Prussia.....	16,525	37,673	54,198
Germany.....	578,264	817,619	1,395,883
Holland.....	10,790	10,148	20,938
Denmark.....	1,791	2,709	4,499
Sweden & Norw.	15,198	19,562	34,760
Poland.....	495	976	1,471
Russia.....	917	301	1,218
Turkey.....	87	69	156
Switzerland....	12,722	23,265	35,987
Greece.....	85	29	114
Italy and Malta.	4,675	7,284	11,959
Other Countries.	53	...	53

Contin'l Europe.	786,948	995,986	1,782,935
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British America.	57,833	50,632	108,465
South America..	4,977	861	5,838
Central America,	519	437	956
Mexico.....	14,688	2,584	17,272
West Indies....	29,827	8,397	38,224

America.....	107,844	62,911	170,755
Asia.....	145	32,518	32,663
Africa & Ocean'a	1,046	2,516	3,562
All other C'tries	22,234	22,234

Grand Total.	2,308,765	2,611,005	4,623,270
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Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are as interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$333,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	90	96
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	78	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1865	40	42
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	94	96
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	82	82 1/2
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1868		
Cleveland, Painesville, and Ashtabula	667,000	Do. convertible	7	Feb'y, August	"	1861	97	100
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	65	70
Do. do.	1,200,000	Do. on branches	7	March, Sept.	"	1873	60	67
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	800,000	Do. convertible	7	April, October	"	1862-72	30	50
Do. do.	1,200,000	Do. conv. till 1857	7	April, October	"	1862-72	30	50
Covington and Lexington	400,000	Do. convertible	7	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1868	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	87	89
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1861	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	65	72 1/2
Galeta and Chicago	2,000,000	Do. convertible	7	Feb'y, August	"	1863	93	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90 1/2	92
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	84	88
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	10	10 April, 10 Oct.	"	1873		
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1868		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1868		
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1867	7	March, Sept.	"	1866	87	90
La Crosse and Milwaukee	850,000	1st mort. 1st sec. conv. till 1864	7	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	71	73
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1853	83	85
Michigan Central	1,000,000	No mortgage, convertible	6	April, October	Bost.	1860	95	97
Do. do.	600,000	Do. do.	6	March, Sept.	"	1869	92	93
Milwaukee and Mississippi	800,000	1st mort. 1st sec. conv. till 1867	8	Jan'y, July	N.Y.	1862		
Do. do.	650,000	Do. 2d do. 1863	8	April, October	"	1863		
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	67	72 1/2
New Albany and Salem	600,000	Do. 1st section	10	April, October	"	1868-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1853	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		
Ohio and Indiana	1,000,000	Do. do.	8	Feb'y, August	"	1867	70	75
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-68	70	77 1/2
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	57	62
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	100 1/2	101 1/2
Racine and Mississippi	680,000	Do. conv. sink'g p'd	8	Feb'y, August	N.Y.	1875		
Seloto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	68	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	84	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	85	97
Do. do.	4,000,000	2d mortgage convertible	7	March, Sept.	"	1859	80 1/2	81
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1858	60 1/2	70
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1880	47 1/2	43 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	20	23
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	20	21
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	20	22
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	103	104
Do. do.	2,000,000	2d do. do.	7	10 June, 10 Dec.	"	1860	95	96 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	79 1/2	79 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	88 1/2	90
Do. (Free Land)	3,000,000	M'tge 345,000 acrs-priv. 7 shars	7	March, Sept.	"	1860	96	95 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	84	87
New York and Harlem	1,200,000	Do. do.	7	May, Novemb.	"	1861-72	94 1/2	95
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1860-66	96	99
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	94	94 1/2
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	81	83
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	71 1/2	72
New York Central	8,287,000	N. mortgage, do.	6	May, Novemb.	"	1833	94	95
Do. do.	3,000,000	om'ge conv. from June 57-59	7	10 June, 10 Dec.	"	1864	104	104 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	114	
Do. 2d do	1,470,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,000,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	3,469,000	Do. convertible	6	Jan'y, July	"	1870	85	85 1/2
Do. do.		Do. inconvertible	6	April, October	"	1866	76	76 1/2

CITY SECURITIES.	Int't payable.	Off'd.	Ask.	CITY SECURITIES.	Int't payable.	Off'd.	Ask.
New York, 5 per ct. 1858-60	98 1/2	99		Milwaukee, 7 per ct. coup.	X	Divers	45
Do. 5 do. 1870-75	93	94 1/2		New Orleans, 6 per ct. cp. R.R. X	Do.	Do.	75
Do. 6 do. 1883	103	103 1/2		N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	87 1/2	91
Do. 5 do. 1890-95	92	93 1/2		Philadelphia, 6 per ct. 1876-98	Jan'y, July	100	100 1/2
Albany, 6 per ct. coup. 1871-81 X	99	101		Pittsburgh, 6 per ct. coup.	X	Divers	46
Allegheny, 6 per ct. coup. X	80	80		Quincy, 8 per ct. coup. 1868 X	Jan'y, July	67	75
Baltimore, 6 per ct. 1879-90	97 1/2	100		Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug.	80	80
Boston, 6 per ct. coup. X	101	102		Rochester, 6 per cent. coup. X	X	Divers	90
Brooklyn, 6 per ct. coup. Long X	102 1/2	103		St. Louis, 6 per ct. coup. Long X	Do.	Do.	84
Clev'rd, 7 per ct. cp. W.W. 1879 X	100	103		Do. do. Municipal X	Do.	Do.	85
Cincinnati, 6 per ct. coup. X	92 1/2	95		Sacramento, 10 per ct. cp. 1862-74 X	Do.	Do.	35
Chicago, 6 per ct. coup. 1873-77 X	85	86		S. Francisco, 7 per ct. 1865 pay N.Y. X	May, Novemb.	60	70
Do. 7 per ct. coup. 1880 X	97	99 1/2		Do. 10 per ct. cp. 1871 X	Do. do.	90	91
Detroit, 7 per ct. cp. W.W. 1873-78 X	100	102		Do. 10 per ct. pay N.Y. X	Jan'y, July		
Dubuque, 8 per ct. cp. Long X	100	100		Do. 6 per ct. pay N.Y. 1875 X	Do. do.	56	61
Jersey City, 6 per ct. cp. W.W. 1877 X	99	101		Wheeling, 6 per ct. coup. X	X	Divers	60
Louisville, 6 per ct. cp. 1880-83 X	72	73 1/2		Do. 6 per ct. cp. Mun. 1874 X	March, Sept.	80	81 1/2
Memphis, 6 per ct. coup. 1882 X	94	70		Kansville, 7 do. X	April, October		

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending May 3, 1859.

BONDS.	Per cent.
Little Miami, 1st Mort.	68 1/2
Covington and Lexington, 1st Mortgage	68 1/2
Do. do. 2d do.	75 1/2
Do. do. Income	10 1/2
Ohio & Miss. E. D., Construction	75
Cinc., Ham. and Dayton, 1st Mortgage	75
Do. do. 2d do.	75 1/2
Indianap. & Cincinnati, do. do.	75 1/2

STOCKS.

Cincinnati, Hamilton & Dayton	60
Columbus and Xenia	88
Indianapolis & Cincinnati	84
Little Miami	90
Ohio and Mississippi (E. D.)	60

Great Western (Ca.) Railway.

ABSTRACT OF THE HALF YEARLY REPORT.

The total amount of share capital which the company has been authorized to raise is £5,301,369 16s. 2d. sterling, under six acts of the Provincial Parliament. The company has received on capital account, up to the 31st January, 1859, £4,840,548 1s. sterling.

The total expenditure of the company on capital account, up to the 31st January, 1859, has been £4,803,934 17s. 5d. sterling.

The balance of the revenue account, after adding the surplus from last half-year, and deducting interest upon loans, amounts to £58,613 11s. 11d., which is equal to a dividend at the rate of 4 per cent. per annum on the share capital. It is not proposed, however, to declare that rate of dividend, as the sum of £11,049 1s. 4d., standing at the debit of the Desjardins Canal accident account has to be written off, leaving the available balance £47,564 10s. 7d. out of which the directors recommend the payment of a dividend at the rate of 3 per cent. per annum. This will absorb £44,214 11s. 9d., and leave £3,349 18s. 10d., to the credit of the current half-year.

The traffic of the Great Western Railway proper during the past half-year shows a decrease, as compared with the corresponding six months (Jan. 31, 1858) of £43,098 9s. 4d. sterling, which is equal to nearly 17 per cent.

The average weekly earnings were £8,067 2s. 2d. equal to £27 10s. 4d. per mile per week.

The working expenses, inclusive of renewals, have amounted to £105,801 14s. 11d., or equivalent to 50.05 per cent. of gross receipts, showing a reduction, as compared with the corresponding period of last year, of £27,807 14s. 6d. equal to 20.84 per cent.

The traffic as compared with the previous half-year (31st July, 1858), shows a decrease of only £1,789 19s. 8d., being little more than 1 per cent.; and the working expenses, exclusive of renewals, show the large reduction of £11,209 16s. 2d. or 9.46 per cent.

The cost of maintenance has been reduced by £4,890 7s. 1d., equal to a reduction of more than £17 9s. 4d. sterling a mile, as compared with the charge during the corresponding half-year.

The report from the engineer shows the line to be in a sound and satisfactory state.

The cost of the locomotive service has been reduced by £12,507 4s. 2d., as compared with the corresponding half-year. The miles run by engines on traffic account have been also reduced from 758,300 to 681,560, or rather more than 10 per cent. and the rate per mile from 0.323 dols. to 0.270 dols.

The stock is in excellent condition.

The working of the Galt and Guelph line has again resulted in a loss, but only to about half the amount of the previous six months—viz: £420 10s. 10d. sterling, against £802 2s. 3d. This line, however brings a considerable accession of traffic to the main line, which could not otherwise reach it; and it is now fairly to be expected that a good harvest, and the consequent improvement in the trade of the country, would enable it to earn not only its working expenses, but also a profit.

The Sarnia Extension was opened for traffic on the 27th December, 1858, and one train each way has been run upon it since that date. The traffic was not expected to be much during the

winter; but it has more than paid expenses, and is improving and adding to the traffic of the main line.

The Detroit and Milwaukee railroad will this spring come into effective operation as a thorough line; and the directors have unabated confidence that it will prove a valuable feeder to the traffic of this company.

American Railroad Journal.

Saturday, May 7, 1859.

Railroad Competition.—New York and Erie Railroad.

We were a little too fast last week in saying that the competition between the four great lines was for the *through* freight to New York from points in the West common to them all. The Erie and the Central, not content with the general row, are having a very pretty quarrel of their own. Between all points and the city of New York common to these lines, a most vigorous competition is going on, which has reduced charges upon freight to merely nominal rates. We have it from good authority that the Central company are desirous of putting an end to this suicidal strife, but that the Erie will listen to no propositions of the kind. This company is, we believe, persisting in its present course, for the purpose of punishing the Central for alleged misdeeds by that company. Very likely the Central is seriously injured, but it is plain to see that if the controversy goes on much longer, the Erie must quit the field from sheer exhaustion. It is already in default in considerable amounts on the interest due on its bonds. Strikes from non-payment of wages, or from dissatisfaction from one cause or another, seem to be a chronic condition of the road. The public press ignores its existence altogether, or if they refer to it at all, it is only by way of censure or sneer. The public follow the lead of the press. A confirmed quarrel has succeeded the recent hollow truce between the four lines. Were one party to be believed all others are a very bad set. We should certainly be unwilling to repeat the language which the managers of one road habitually use about others. In fine it is hard to imagine so many unfortunate circumstances as are now concurring to impair the prosperity and usefulness of our great roads; and what is worse than all, we see no immediate prospect of improvement.

This then is the millenium to which the extraordinary measures inaugurated by the Erie Railroad Company, and pushed with so much pertinacity, have brought us to. If the conclusion be so unfortunate, may not the inference be fairly drawn that the measures that lead to it were injudicious and ill-advised. We have the greatest respect for the motives, character and general capacity of the chief executive of this company; but we suggest, that when he differs so widely, as he often does from others equally disinterested, and in equally favorable positions for forming correct opinions, whether a certain degree of respect for their opinions should not abate in some small degree, the emphasis which he usually gives to his own. It is certainly clear that the Erie cannot long go on as at present, and sustain itself. We should feel it a great misfortune to have the company lose Mr. Moran, provided he would adopt such a line of policy as will give to his services their full value, and at the same time bring to his

aid such other influences and co-operation as we deem essential to the success of the road.

Morris Canal and Banking Company.

The time of closing the financial year of this company has been changed from December 31st, to February 28th. This was deemed expedient by the board, as it would more nearly embrace the period of the income and disbursements, from the commencement of navigation of one year to that of the succeeding year. Consequently the report just issued by them covers a period of fourteen months—and includes all the expenditures for repairs, etc., during that time, without a corresponding revenue from business—the canal having been opened for business about the 1st of April, and closed the second week in December.

Notwithstanding the general depression of business, the income of the company from all sources has been sufficient to defray all current expenses, to keep the canal in repair, to pay the interest on their bonded debt, the usual dividend of 10 per cent. on their preferred stock, and \$1 50 per share on the common or consolidated stock.

The income from tolls, etc., were....\$275,019 44
Repairs of canal and works.....\$73,760 02
Operating canal..... 37,033 20
Salaries..... 10,623 46
Interest..... 1,829 43
Miscellaneous..... 9,124 43

Profits of the business.....\$142,648 90
Balance December 31, 1857..... 86,837 03
Receipts from other sources..... 4,552 83

Disbursed as follows, viz:

Dividends.....\$168,784 69
Interest on mortgage bonds..... 26,640 90
Discount on mortgage bonds..... 3,910 00
Depreciation of boats etc. 3,311 64
Old claims settled..... 12,372 54

Surplus, February 28, 1859..... \$19,018 99

The income from tolls and other sources in each of the following years has been—

1845.....	\$18,997 45	1852.....	\$140,202 28
1846.....	51,212 39	1853.....	187,449 71
1847.....	67,687 09	1854.....	245,431 55
1848.....	65,531 75	1855.....	272,125 23
1849.....	90,220 48	1856.....	313,026 15
1850.....	98,224 25	1857.....	286,668 61
1851.....	110,730 56	1858.....	275,019 44

The total tonnage of the canal for each of the following years has been—

1845.....	58,259	1852.....	358,797
1846.....	109,505	1853.....	467,288
1847.....	155,559	1854.....	543,269
1848.....	204,682	1855.....	553,204
1849.....	234,305	1856.....	563,386
1850.....	239,682	1857.....	536,362
1851.....	281,707	1858.....	554,034

BALANCE SHEET.

Capital stock—Common.....	\$11,000 00
“ “ Consolidated.....	1,014,000 00
“ “ Preferred.....	1,051,400 00
Funded debt—7 per cent. mortgage bonds.....	250 00
Funded debt—6 per cent. mortgage bonds.....	465,500 00
Liabilities—bills payable, etc.....	113,272 60
Profit and loss.....	19,018 99

\$2,674,442 59

Cost of canal and appurtenances....	\$2,603,295 91
Cash.....	13,981 68
Bills receivable.....	1,391 24
Individual accounts.....	55,773 76
	\$2,674,442 59

OFFICERS.

EPHRAIM MARSH, *President*.
WM. H. TALCOTT, *Superintendent and Engineer*.
LEWIS N. CONDIT, *Secretary*.

A New Turn-Table.

In another column will be found an advertisement of a new turn-table, entitled “Ward’s Patent Self-Centering Turn-Table.”

The peculiarity of this table is in the use of hollow iron balls, running in circular grooved tracks, instead of wheels or trucks, thereby getting rid of all friction, not necessarily incident to the rolling of a circular body.

We understand that the table described has been used with success. The idea is an ingenious one, and will undoubtedly receive attention from railroad companies.

Bellefontaine Line.

The line is made up of the Bellefontaine and Indiana and the Indianapolis, Pittsburg and Cleveland roads, extending from Indianapolis to Crestline, 206 miles.

The annual report of the first named road, recently issued, states that the business of this road shows a decrease, as compared with 1857, in passenger and express earnings, and an increase on freight traffic. The reduction of working expenses, when taken into account, present an increase of net earnings over the previous year. The figures are as follows:

BUSINESS FOR THE YEAR 1858.

Earnings—From passengers.....	\$114,564 00
From freights.....	192,525 53
From mail.....	17,850 00
From express.....	7,287 17

Total.....	\$332,226 70
Working expenses.....	\$185,414 24
Interest on bonds.....	90,328 00
Taxes.....	8,261 11—\$284,004 35

Balance net..... \$48,222 35
The working expenses are a fraction over 56 per cent.

COMPARISON WITH PREVIOUS YEAR.

Earnings for 1857.....	\$348,351 83
Earnings for 1858.....	332,226 70

Decrease in 1858..... \$16,125 13

Which is divided as follows:

Decrease on passengers.....	\$30,047 07
Decrease on express.....	2,982 95

Total.....	\$33,030 02
Increase on freight.....	16,904 89—\$16,125 13

Working expenses of 1857.....	227,515 59
Working expenses of 1858.....	185,414 24

Decrease in 1858.....	\$42,101 35
Deduct decrease of earnings.....	16,125 13

Net increase for 1858..... \$25,976 22

Except what is termed the car loan, explained in the last report, the company has no floating debt.

An arrangement to extend the income bonds due 1st February 1859 to 1870 has been made, and a sinking fund of \$20,000 per annum established for them. The Directors recommend another sinking fund for the bonds due in 1866.

The apparent earnings of the road are about $3\frac{1}{2}$ per cent. on the stock.

The gross earnings of the Indianapolis, Pittsburg and Cleveland railroad for 1858 present about a corresponding decrease with those of B. and O. The figures are as follows:

BUSINESS OF THE YEAR.

Earnings—From passengers.....	\$99,740 09
From freights.....	115,225 93
From mail.....	12,750 00
From express.....	5,189 43

Total.....\$232,905 45

Transportation expenses.....	\$134,069 14
Interest and taxes.....	72,364 13
Interest and cost of floating debt.....	2,746 74
Ballast amount.....	5,977 22
	\$215,157 23

Balance net.....\$17,748 22

The working expenses proper are a fraction over 57 per cent., with nearly 50 per cent. of gross earnings from freight transportation, at, during a portion of the year, very low rates.

The amount of bonds and stock on the 1st of January, 1859, stood as follows:

First mortgage bonds.....	\$656,000
Second mortgage bonds.....	169,500
Income bonds.....	166,500
Domestic bonds.....	35,200
Capital stock.....	\$1,025,200 00
	835,961 26

Total bonds and stocks.....\$1,861,171 26

FLOATING DEBT.

The amount of floating debt reported as due the first of January, 1858 was.....	\$34,578 85
Amount 1st of January, 1859.....	19,718 65

Reduction during the year.....\$14,860 20

Of the amount due 1st of January, 1859, the sum of \$3,194 59 had since been paid, leaving floating debt at this time \$16,524 06. Three hundred thousand dollars of the first mortgage bonds will mature 1st January, 1860, of which \$30,000 are in the sinking fund. These bonds, it will be necessary to extend.

Railroad Earnings.

The following is a statement of the Ohio and Mississippi railroad for March:

	1858.	1859.
Passengers.....	\$74,309 00	\$85,426 14
Freights.....	52,873 20	59,958 72
Mail.....	5,150 00	6,633 33

Totals.....\$132,332 20 \$152,018 19

Increase.....\$19,685 99

The receipts of the Grand Trunk Railway of

Canada for the week ending April 16,

were.....\$46,963 46

Week ending April 17, 1858.....49,356 39

Increase.....\$2,392 93

Total traffic from July 1st.....\$1,816,080 68

Same period last year.....1,897,319 04

Decrease.....\$81,238 36

The earnings of the New York and New Haven

Railroad for April were:

From passengers, &c.....	\$84,651 86
" freight.....	15,560 00

Total.....\$100,151 86

Less due other roads.....22,291 34

Balance.....\$77,860 52

For April, 1855.....\$67,068 40

For April, 1856.....72,811 97

For April, 1857.....76,212 51

For April, 1858.....68,595 19

Gain over last year, \$9,265 53.

The earnings of the Brooklyn City railroad in April, 1859 were.....\$37,319 18

April, 1858.....30,195 24

Increase.....\$7,123 94

The business of the Connecticut River Railroad

for the three months ending April 1, was as follows:

	1858.	1859.
Gross receipts.....	\$60,445 49	\$73,876 59
Operating expenses.....	32,202 26	38,891 89

Net earnings.....\$28,243 23 \$34,984 70

Increase in net earnings.....6,741 47

Traffic of the Great Western Railroad, for the

week ending April 22, 1859.

Passengers.....	\$22,884 53
Freight and live stock.....	12,950 90
Mails and sundries.....	1,290 22

Total.....\$37,125 65

Corresponding week of last year.....\$50,460 88

The Hudson River Railroad receipts for April,

were.....\$121,123 24

For April, 1858.....112,614 60

Increase, this season.....\$8,508 04

We invite attention to the advertisement,

in another column, of Messrs. JAMES ANDERSON

& Co. They are the sole agents for the Troy Bell

Foundry, the proprietors of which are prepared

to furnish bells of all descriptions, cast and hung

on an entirely new principle, from 20 to 20,000 lbs,

which are warranted superior in quality of tone,

prolongation of sound, and durability, to those

made by any other establishment. Their new

mode of casting bells, in Metallic casings, is an

improvement not to be surpassed. Bells made in

this way far excel those cast in the ordinary way.

This was tested in competition with different bell

founders' at the Fair of the Merchants' Metropol-

itan Institute, held at Washington in February,

1853; at the State Fair, held at Saratoga Springs,

in September, 1853; at the Fairs of the American

Institute, held in New York, in October 1853, and

1855; and at the exhibition of all Nations, held at

the Crystal Palace in January, 1854—the latter in

competition with those of Europe, and several

from this country. The Troy Bell Foundry are

prepared to fill orders for Church, Steamboat,

Ship and Locomotive Bells; also, Fire Alarm

bells, chimes of bells, etc., etc., etc. Address

Messrs. JAMES ANDERSON & Co., agents, Nos. 23

and 25 Dey street, New York.

Greenville and Columbia Railroad.

At the annual meeting of the stockholders of

this company recently held, the following gentle-

men were elected directors, viz: Hon. T. C. Perrin,

Hon. J. B. O'Neill, Simeon Fair, T. M. Cox, D.

Blake, C. G. Memminger, J. P. Reed, J. M. Allen,

V. McBee, Hon. J. N. Whitner, J. F. Livingston, C.

Smith, R. Stewart.

Street Railroads.

The Philadelphia Inquirer says that the lead-

ing street railroads of that city can no longer be

regarded as an experiment. They are in the full

tide of success; and, while they afford extraordi-

nary facilities to the community at large, they are

likely to yield a very handsome interest on the

sums that have been invested in their construc-

tion.

New London, Willimantic and Palmer R. R.

The trustees of the first mortgage bondholders

of this road, have obtained a decree of foreclosure

in the New London County Supreme Court, against

the company and the subsequent mortgages. The

indebtedness of the road was \$500,000 upon the

first mortgage bonds, \$300,000 on the second, and

\$100,000 to New London city. The court decreed

a foreclosure in favor of the petitioners, limiting

the right of redemption for the corporation to the

second Monday of October next, and for the city

of New London to the fourth Monday of October

next. It is said that the trustees will apply to the

Legislature for an act of incorporation under

which to operate the road.

Post on Wooden Bridges.

We have been frequently applied to by letter for

copies of Mr. Post's work on "Bridges." We can

only supply it through the columns of the Jour-

NAL where it is first published from the original

manuscript.

Pennsylvania Railroad.

We have received the Twelfth Annual Report of

the President and Directors of this company, for

the fiscal year ending December 31, 1858, which

was presented to the stockholders at their annual

meeting held in Philadelphia February 7th.

From the tabular statements of the accounting

department accompanying the report we learn

that the earnings of the railroad for the year were:

From transportation of freights.....\$3,536,206 31

" " " passengers.....1,298,142 33

" " " emigrants.....74,095 02

" " " mails.....74,489 04

" " " Adams' Ex-

press.....75,120 00

" rents of workmen's houses, etc.....29,698 95

" individuals and companies.....56,899 08

" sundry sources.....40,679 95

\$5,185,330 68

The total expenses were as follows:

Conducting transportation, including

tolls paid the Harrisburg and Lan-

caster, and Northern Central rail-

roads, (\$270,181 57) and tax on

tonnage paid the State, (\$240,754

65).....\$1,280,798 33

Motive power depart.....915,278 05

Maintenance of way.....560,278 18

" " cars.....192,377 60

General expenses.....73,152 87

3,021,885 04

Leaving net earnings.....\$2,163,445 64

The earnings of the road from passengers show

a decrease from the previous year of \$75,213 for

first class, and \$7,073 for emigrants—a total de-

crease in this department of \$82,286. When it is

considered that the number of immigrants that

arrived at our ports in 1858, was less than half the

number that arrived in 1857, the per centage of

diminution in that branch by business will be

deemed small.

The total number of first class passengers car-

ried over the road during the year was 1,012,803,

viz: on the Philadelphia division (Philadelphia to

Columbia), 169,379; on the Harrisburg and Lan-

caster railroad, 109,481; on the Columbia Branch,

27,749; and on the Pennsylvania railroad, between

Harrisburg and Pittsburg, 119,358. In addition

to which there were 16,216 emigrants transported

from Philadelphia to Pittsburg, and 606 to points

on the line of the road east of Pittsburg.

Of the gross earnings for freight, \$3,260,727 49

was for freight carried in the cars of the company,

and \$275,478 82 for tolls and motive power in the cars of individuals.

The freight transported in the cars of the company was 221,210 tons through, and 365,075 way (including coal); and in the cars of individuals, 460,622—making a total of 1,046,889 tons moved.

If to this be added 90,300 tons of coal, etc., for the use of the company, it gives 1,137,189 tons as the entire freight moved upon the road. This exhibits an increase in the tonnage moved of 43,614 tons (omitting the supplies for the road); and an increase in freight earnings of \$159,690 05 over the previous year. The through freight in the cars of the company shows an increase of 49,317 tons; and the way freight an increase of 6,710 tons—while that in the cars of individual transporters shows a decrease of 12,233 tons, below that of 1857.

The total claims for goods lost, damaged or delayed, was but \$8,054.

The amount of coal delivered in Pittsburgh during the year was 99,540 tons—being 1,921 more than in 1857. The total number of tons of coal carried in the cars of the company was 140,007, and 200,531 in the cars of individuals.

An increase in the number of cars for the accommodation of live stock, coal and lumber, will be required. In other respects the equipment is deemed sufficient for the business of the ensuing year. It consists of the following, viz: 209 freight and passenger locomotives; 56 eight-wheeled wide, and 12 narrow passenger cars; 31 emigrant, 27 baggage and 8 express cars; 1,809 eight-wheeled house, stock and platform cars; and 591 four-wheeled freight, coal and hand cars.

Work upon the double track has not been prosecuted during the past year. The number of miles still remaining to complete it throughout is about 87.

In view of the increased business anticipated from the completion of the Pittsburgh, Fort Wayne and Chicago road, and the extension of their own road to the Delaware river, the board recommend the completion of the double track between Pittsburgh and Lockport on the west of the mountains, and between Tyrone and Mill Creek, on the east, amounting together to less than 28 miles.

The alteration of tracks required to pass the wide cars of the company from the station in Philadelphia to that in Pittsburgh was finished in August last, and passengers now travel between these cities without change of cars. The Cleveland, Chicago, Indianapolis and Cincinnati trains now leave the station of this company in Pittsburgh—thus avoiding the cost and inconvenience arising from the use of drays and omnibuses, in the transfer of passengers and freight in that city.

Measures are now in progress which give reasonable assurance of the completion of the Pittsburgh and Steubenville railroad within the next year. The company will thus secure a route 24 miles shorter than the present one to all the south-west.

Application having been made to this company for aid towards furnishing the rails to complete the Tyrone and Clearfield railroad, the board have agreed to receive in payment of passenger fares and dues for freight that may accrue for transportation to and from that road, and passing on the Pennsylvania road 60 per cent. in cash, and 40 per cent. in the 1st mortgage bonds of that company;

provided the amount of the 1st mortgage, which is not to exceed \$200,000, shall complete the road from Tyrone to Phillipsburg.

The board has withheld the payment of the tonnage duty claimed as due in December, with a view if the legislature fails to remove this enormous burden upon the trade between the east and west, to test the constitutionality of the impost before the courts. Under the operation of this and other tax laws, this company would pay for the year 1858, \$319,020 66.

The floating or unfunded debt existing at the date of the last annual report, has been reduced below three per cent. upon the paid capital of the company—indeed it may be said to have been practically extinguished, as the resources of the company immediately available are ample to meet it at any time.

By reference to the annexed statement of the treasurer, it will be seen that the amount of the original subscription to the Marietta and Cincinnati railroad, and the income bonds received as interest from that company, together with the subscription originally made to the Springfield, Mount Vernon and Pittsburgh railroad, have been charged to profit and loss account. In regard to the aid rendered by this company to the Pittsburgh, Fort Wayne and Chicago, and the Steubenville and Indiana railroad companies, the report says:

The business of neither of these companies yields a direct return for the amount invested in them, yet the increased traffic drawn to the Pennsylvania railroad by the connections thus formed with the north-west and the south-west, has afforded a fair equivalent for the outlay, while it has at the same time secured great commercial advantages to this city. We do not apprehend any material loss, other than the interest for a few years, upon the investments in these enterprises. The additional assistance given by this company to the Pittsburgh, Fort Wayne and Chicago railroad company during the past year, has enabled it to extend its road from Plymouth into the city of Chicago, a distance of 82 miles. This aid consisted mainly of iron rails removed from the Portage railroad, purchased by this company from the Commonwealth, and no longer used by it in consequence of its occupying practically the same ground with the Pennsylvania railroad across the Alleghany Mountain. The whole amount of cash expended for removing rails from the Portage road, and for new rails, spikes and chairs, amounted to \$239,075 21. For this advance, and the value of the iron furnished from the Portage road, the Pennsylvania railroad company is amply secured by a pledge of \$650,000 of the first mortgage bonds of the Pittsburgh, Fort Wayne and Chicago railroad company, together with a general oversight of that work until this advance is returned. This road was opened through to Chicago on the 25th of December last. It still requires a considerable outlay to place it in a condition to compete upon equal terms with its rivals. This will be made during the ensuing spring and summer.

The earnings of the entire line of canal, 276 miles in length, for the year 1858, amounted to.....\$179,100 08 And the expense of operating and maintaining it for the same time was.....124,058 32

Leaving the net earnings.....\$55,041 76

The transportation of coal and lumber from the Broad Top and Alleghany regions may hereafter make the lower Juniata Division, from Huntingdon to the junction, yield an income at least equal to its expenditures, when the depth of water shall have been increased to five feet; but that portion of the canal west of Huntingdon must continue to be unremunerative.

The conditions of the purchase of the Main Line from the State require that the upper Juniata and lower Western divisions shall be kept in navigable order. In reference to the upper Western division no such requirement exists, and as there is no local interest that would be injuriously affected by closing this part of the line, it is not proposed to incur in future any considerable expense in its preservation.

The board has directed the Engineer to proceed at once to deepen that portion of the canal from Columbia to the south bank of the Juniata, so as to admit of five feet depth of water, to accommodate the growing coal and lumber traffic of the Susquehanna Valley. This improvement, which is essential to the maintenance of this canal as a profitable avenue, with the rebuilding of several aqueducts on the Juniata, (all of which are in a dilapidated condition,) will about absorb the profits of the canal for the past year. After these improvements and renewals are completed, the Canal Department, under the economical system adopted for its management, will, we trust, yield an interest at five per cent. on one and a half millions of dollars incurred in the purchase of the Main Line.

The following is a condensed exhibit of the earnings and expenses, together with net earnings for each month during the year:

	Gross earnings.	Expenses.	Net earnings.
Jan....	\$342,776 42	\$220,776 72	\$121,999 70
Feb. ...	312,403 18	202,857 12	109,546 06
March..	516,553 24	248,226 36	268,326 88
April... 550,595 54	270,609 20	277,986 34	
May ... 481,906 62	260,778 29	221,128 33	
June ... 399,436 03	274,897 04	124,538 99	
July ... 384,070 36	249,314 37	134,755 99	
Aug. ... 431,846 97	240,488 44	191,358 53	
Sept.... 451,704 33	260,140 99	191,563 34	
Oct. 463,222 34	271,602 64	191,719 70	
Nov. ... 439,844 59	259,048 41	180,796 18	
Dec. ... 410,971 06	263,245 46	147,725 60	
Total...	\$5,185,330 68	3,021,885 04	2,163,445 64

GENERAL STATEMENT.

Capital stock	\$13,240,225 00
Bond account, viz:—	
First mortg. six per cent. dollar bonds, payable 1880	4,905,000 00
Second do. do. payable 1875..	1,928,000 00
Do. do. sterling do. 1875	1,539,840 00
Bonds due the State, bearing 5 per cent. interest	7,400,000 00
Mortgages and ground rents on real estate	321,611 11
Bills payable	254,164 60
Accounts payable	222,438 12
Contingent fund	138,753 58
Interest and dividends unpaid	25,664 66
State tax on bonds and dividends unpaid	58,239 79
Balance to credit of profit and loss, after charging to this account the original subscription to the Marietta and Cincinnati Railroad, (\$750,000,) and to the Springfield, Mount Vernon and Pittsburgh Railroad, (100,000,) and the income bonds received as interest from the Marietta and Cincinnati Railroad Company, (\$97,500); also, discount upon Company's dollar b'ds, (\$224,484 95,) and sundry other items, (11,000,) the whole amounting to \$1,182,984 95	135,050 31

Amount	\$30,168,987 17
Receipts from the business of the road for 1858	\$5,114,925 34
Receipts from the business of the canals for 1858	181,541 88
	5,296,467 22
	\$35,465,454 39

Cost of road, from Harrisburg to Pittsburg	\$16,448,185 39
Less profits of road, after paying interest to stockholders up to Nov. 1, 1855, credited to cost of construction, as required by the charter	589,185 79
	\$15,853,949 60
Cost of Philadelphia and Columbia Railroad ..	\$6,000,000
Cost of Canals & Portage Railroad	1,500,000
	7,500,000 00
Cost of equipment	2,828,529 27
Cost of real estate	1,540,381 05
Cost of telegraph line	45,264 28
Extension of Pennsylvania R. R. to Steubenville and Pittsburg R. R. Amount of stock of the Pittsburg, Fort Wayne & Chicago R. R. Co.	4,547 72 816,050 00
Bonds of municipal and railroad corporations	50,752 50
Bills and accounts receivable	790,546 51
Balance in hands of agents	206,992 37
Balance in hands of Treasurer, De- cember 31, 1858	531,973 87
Amount	\$30,168,987 17
Transportation expenses, tolls paid other roads, interest, insurance, general office expenses, tonnage tax, tax on capital stock and tax on real estate, sale of uncurrent funds, etc.	\$3,519,119 44
Expenses of canal, (ordinary & extra- ordinary)	129,743 84
Dividends paid to stockholders	715,383 00
Interest on bonds ..	593,457 85
Surplus profits of road and canals	338,763 09
	5,296,467 22
	\$35,465,454 39

OFFICERS.

J. EDGAR THOMSON, *President*.
WM. B. FOSTER, JR., *Vice President*.
THOMAS T. FIRTH, *Treasurer*.
EDMUND SMITH, *Secretary*.
HERMAN J. LOMBAERT, *Auditor*.
THOMAS A. SCOTT, *General Superintendent*.
G. W. GRIER, *Master of Machinery*.

Cincinnati, Wilmington and Zanesville R.R.

This decree for the foreclosure and sale, in three years and a half from April 21, of the Cincinnati, Wilmington and Zanesville railroad, at the suit of the first and second bondholders, was entered upon the records of this Court yesterday. The amount of the first mortgage is \$1,300,000, upon which \$294,000 interest has accrued; the amount of the second mortgage is \$600,000, with interest accrued of something over \$135,000. The priority of the first mortgage bonds is conceded; payment on the first mortgage is postponed for three years, without the payment of any definite amount of interest. At the end of three years from this date the Company is to resume payment of interest on the first mortgage, all arrearages of interest to be funded, and draw interest at the rate of 7 per cent. for fifteen years, from 1862.

The Second mortgage bonds are recognized as next in order of priority: the payment is not deferred to any definite period, but the holders of this class of securities may at any time, the company and a majority of the third mortgagees not objecting, sell the road, subject to the first mortgage extending as above. There is a reservation in favor of the proposed extension of the Cincinnati, Wilmington and Zanesville road, from Morrow Junction to Glendale, on the Cincinnati, Hamilton and Dayton road, by which the rights of all parties in interest in that extension are to be protected. Wm. Key Bond of this city, is appointed

Receiver, at a salary of \$2,500 per annum, in place of Erasmus Gest, removed by the terms of the arrangement.

Mr. Gest's vouchers have been examined by the new receiver, and found to correspond with the disbursements.

There would now seem to be no doubt of the building of the Glendale extension of this road, which will secure a superior, as well as an independent entrance to this city, and, at the same time, a direct rail connection with the Ohio and Mississippi road, and with the coal markets of the great Miami Valley.—*Cincinnati Com. April 26.*

The Suez Canal.

We have at length an authentic statement of the results of the Suez Canal subscription, and they have certainly been such as to exceed the most sanguine expectations of the projector. The number of French subscribers, willing to hazard their money in the undertaking, amounts to 21,035; and the number of shares actually subscribed for, to 220,000. The whole number of shares is fixed at 400,000, and the company's capital at 200,000,000 francs. Out of this, France has engaged herself for 110,000,000; but the allotment made to her by the original scheme of division is only 40,000,000, so that she has nearly three times exceeded her contingent. M. de Lesseps, it will be seen, has not in vain awakened the enthusiasm or appealed to the vanity of his countrymen. How much of this success is owing to the short-sighted and illiberal opposition of England, or, rather, of Lord Palmerston and his government? for it is but just to acknowledge that every important Chamber of Commerce in the country differed with the views taken by the British Cabinet on this important question. As it is, the prestige of a vast commercial transformation, of world-wide celebrity and interest, is likely to adhere to the French nation and the reign of Napoleon III.—*Paris Cor. Phil. North Am.*

Railroad Traffic in the Interior.

Many persons are casting about them for reasons for this very sudden depression. Some lay it to the threatened war in Europe; others to the competition of rival roads, and others to general depression in business. Some few speak of the want of produce in the West to go forward. This, we think, is the great cause of the falling off in the earnings of the roads, and consequently of the depression in their stocks, although the others may also incidentally affect them.

The West is at present poor—extremely poor. We have little or nothing, comparatively, to send forward to, and next to nothing to get from, the East. We might run in debt, and create for a time an artificial prosperity, but in the end we would only make matters worse.

It is better for all parties—Eastern as well as Western men—that we should keep steadily on our course of retrenchment and economy. The more faithfully and honestly we do so, the better it will be for ourselves in the end, and the far better for our Eastern friends.

Some say the roads should not take freight at low rates; but this is all nonsense. They are so many competing lines of road now, that a monopoly is not possible, or if possible, it is so only in times of great commercial prosperity. Railroads, like everything else, even to the laborer himself, are governed by the laws of supply and demand, and the strong ones will work for nothing and keep themselves, with the hope that in a short time they will be able to kill off the weak ones. Not until this is accomplished will the prices of transportation be put up again.

The Railroad Directors who the soonest make up their minds to the fact, that they can expect no permanent relief, until we have better crops in the West, and who act upon the belief by economizing their expenses as much as possible, will the soonest restore the credit of the corporation which they manage. The vitality of the West consists in its power of production. As long as this is at low ebb, the whole commercial body suffers, and no quack doctoring of any kind will

restore the lost equilibrium. What food is to a starving man, good crops are to the country, especially that country which depends almost altogether upon its agricultural resources.

Economy, then, is the true principle in commerce now-a-days, as indeed it is in politics. We are suffering on all sides, politically as well as commercially, from a system of reckless expenditure, and the sooner we come to a realizing sense of the fact, the better it will be for ourselves.—*Chicago Democrat.*

Statistics of Peruvian Guano.

TABLE OF DEPOSITS.

Southern Section.

Chipana (lat. 21° 22'S)	280,602 tons
Huanillas (lat. 21° 18'S)	1,912,605 "
Punta de Lobos (lat. 21° 6'S)	1,460,790 "
Pabellon de Pica (lat. 20° 57'S)	2,975,000 "
Puerto Ingles (lat. 20° 46'S)	1,292,510 "
Total	7,921,407 "

Central Section: (CHINCHA ISLANDS.)

North Island } lat. 13° 32'S	7,600,000 "
Middle Island }	6,450,000 "
South Island }	4,200,000 "

Total

Northern Section.

Lobos de Tiera (lat. 5° 7'S)	477,858 "
Lobos de Fuera (lat. 7° 3'S)	265,743 "
Guanape (lat. 8° 31'S)	79,800 "
Ferrol (lat. 9° 7'S)	30,700 "

Total

Grand total

2. ANALYSIS OF GUANO.*

Elements.	Chincha a Guano.	Lobos Guano.
	A B C D E	
Water	13 73. 9 30...	12 50. 16 50. 13 35
Organic matter and Ammoniacal salts	53 16. 57 30...	22 00. 23 50. 36 65
Phosphates	23 48. 23 05...	36 90. 41 23. 11 76
Alkaline salts ..	7 97. 9 60...	12 25. 16 27. 36 74
Sand	1 66. 0 75...	12 35. 2 50. 1 50
Proportion of Ammonia	17 00. 18 87...	4 26. 4 35. 6 42

3.—Imported into the United States, (according to the U. S. Treasury Reports.)

1845	1852	39,567
1846	1853	25,862
1847	1854	183,662
1848	869	157,046
1849	17,347	39,078
1850	5,750	64,559
1851	20,059	54,057

Ohio Central Railroad.

The United States Court, sitting at Cincinnati, has granted an application to place the Ohio Central railroad in the hands of a receiver. The court appointed H. S. Jewett, the President of the road, receiver, and fixed the bond at \$20,000, which was given.

The applicant in this instance is George S. Coe, of New York, who, in his petition, represents that the Ohio Central Company had made mortgages to him, as the trustee of other parties to the amount of over \$2,000,000. On a large part of this sum interest is in arrears since the fall of 1857. His bill sets forth the existence of other mortgages, in all amounting to \$2,850,000; and also that the company is largely indebted to other parties, is greatly embarrassed, and utterly insolvent. He, therefore, asks that the road may be sold and the

* A: analysis by Anderson of Scotland; B: at the Kensington Laboratories, London; C, D, & E, by Raymond, a chemist at Lima from different specimens. The amount of ammonia in each sample is given separately in the last line.

proceeds applied to the payment of the debts against it.

The Court, in appointing Mr. Jewett receiver, directed him to operate and protect the property of the road, as he shall deem proper, and requiring him to deposit the surplus earnings of the road in some Bank in Zanesville, or other place along the line, and to file monthly statements of the receipts, disbursements and liabilities. He is to have control over the officers and employees of the road, except the Directors, Treasurer and Secretary, and is required to give bonds in \$20,000 for the faithful discharge of the trust. The surplus earnings are to be applied as follows:

1st. To the payment of all debts due for labor, materials and supplies furnished the company within the six months prior to the date of the decree, and to balances due for construction.

2d. To the payment of all sums borrowed to pay interest upon the mortgaged debt, or for labor or materials, for the payment of which any former or present officer of the company, or any person at the instance of such officer may be liable.

3d. To the payment of any loans made in good faith by any past or present director, for such purpose.

4th. To pay Attorney's fees, &c., for services to complainants in suits pending or terminating at the filing of the bills, and for similar services for the company.

5th. To the payment of the taxes upon the road.

6th. To balances due for right of way.

7th. To discharge liabilities of any person who may have become surety at the solicitation of the complainant of the company in the prosecution or defence of suits, designed to protect the company against third parties.

8th. To refund to George Bartlett the money advanced by him, at the instance of John H. Sullivan, then President of said company, immediately before said road was put into operation; and all securities held by parties liable for claims covered by the 2d, 3d and 8th articles, to indemnify them against loss, or held by any claimant as security for the payment of his claim, are to be transferred to the Receiver, to be applied by him to the same uses to which the money would otherwise be applicable.

King's Mountain Railroad.

The following gentlemen have been elected directors of this company for the ensuing year:—Dr. J. M. Lowry, S. G. Hemphill, W. A. Latta, B. T. Wheeler, E. A. Crenshaw, H. F. Adickes, J. W. Avery, J. R. Bratton, J. S. Ryan.

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THERE will be an election of seven directors of said Company on Monday the 6th of June, 1859, at the office of the Company in Dubuque.

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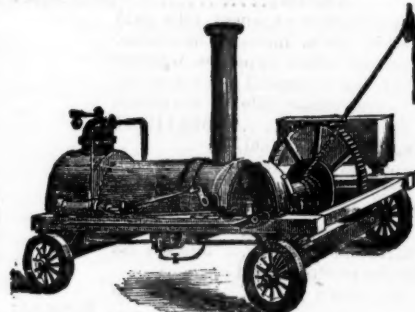
Notice to Contractors.

SEALED PROPOSALS for the grading and masonry of the extension of the ROANOKE VALLEY RAILROAD, from Clarksville to Key-ville, on the Richmond and Danville Railroad, will be received at the office of the Company in Clarksville until the 12th of May. The road will be thirty miles long. Plans and specifications of the work may be seen in Clarksville on and after the 5th of May. Letters of inquiry may be addressed to Henry Wood, Esq., President Roanoke Valley Railroad, Clarksville, Va., or to me at Christiansville P. O., Mecklenburg Co., Va.

B. W. JONES,
Chief Engineer.

4t16

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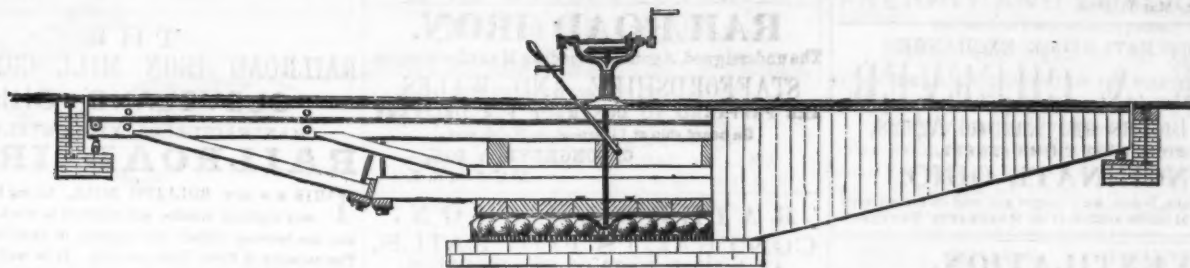
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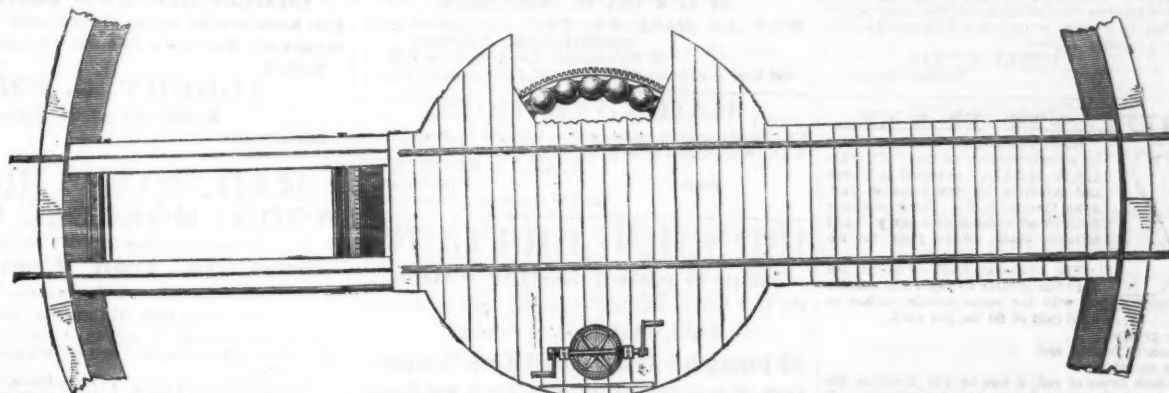
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A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

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INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, JR. WM. ALEX. SMITH.
NEW YORK, May 11, 1858.

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THE undersigned has devised and patented the only system of ventilation for Buildings, Vessels, RAILROAD CARS, &c., by which spontaneous ventilation can be effectually carried out; and is willing to dispose of the same to parties desirous of purchasing at a reasonable price.

A. dress HENRY RUTTAN,
Coburg, Canada.

TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by STEPHENS & JACKSON, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:—
The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater,
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.
Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati, Ohio.

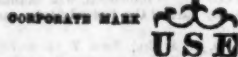
RAILROAD IRON AND COMMON BARS.

THE UNDERSIGNED,
Sole Agents to Messrs. GUEST & CO.,
The Proprietors of the Down's Iron Works,
Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.
R. & J. MAKIN, 70 Broad st.

STEEL, FILES, &c.

R. GROVES & SONS,
SHEFFIELD, ENGLAND,
MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes.
Single and Double Shear, Blisters, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.
A stock of the above goods constantly on hand.



CHAS. CONGREVE & SON, Agents,
18 Cliff street, N. Y.

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The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER Free on Board at Shipping Ports in England, or At Ports of Discharge in the United States, RAILS OF SUPERIOR QUALITY, And of Weight or Pattern as may be required.

VOSE, LIVINGSTON & CO.,
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RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
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Eric Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

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The undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES, ARE PREPARED TO CONTRACT FOR DELIVERY On board ship at Liverpool, or Welsh port.

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RAILROAD IRON.
CONTRACTS FOR RAILS, AT A FIXED PRICE OR ON COMMISSION, DELIVERED AT AN ENGLISH PORT, Or at a Port in United States, WILL BE MADE BY THE UNDERSIGNED, THEODORE DEHON,

10 Wall st., near Broadway, New York.
500 tons T rails on hand 54 to 57 lbs. per linear yard.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER,
BALTIMORE.
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IRON BOILER FLUES.

Lap-Welded Boiler Flues, 1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes, from ¼ to 6 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

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PASCAL IRON WORKS.
Established 1821.
Warehouse—209 South Third st.,
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The Subscribers, Agents for the Manufacturers, ARE PREPARED TO CONTRACT FOR THE DELIVERY OF RAILROAD IRON AT ANY PORT in the United States or Canada, or at a shipping port in Wales.
WAINWRIGHT & TAPPAN,
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IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
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IRON AND STEEL

IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
OUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.
August 16, 1854 1733

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

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upon favorable terms.
JOHN W. HULL & CO.,
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The Crescent Manufacturing Company,
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ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address
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THE
RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,
MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to
ALBERT G. SMITH,
President of the Incorporation.
February, 1858.

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WOOD, MORRELL & CO.,

Having leased the extensive Works of the
Cambria Iron Company,
Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,
And purchased all their real estate,
ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.
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ROUND OAK IRON WORKS,
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Lord WARD, Proprietor.
MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS, of every variety of pattern.
NORRIS & BROTHER,
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BALTIMORE.
And 17 NASSAU STREET, NEW YORK.

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THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

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received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
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BY the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnetic Ores from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per linear yard, viz:—25, 30, 35, 40, 45, 50, 55, 60, 62, and 75 lbs.

Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.

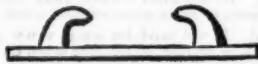
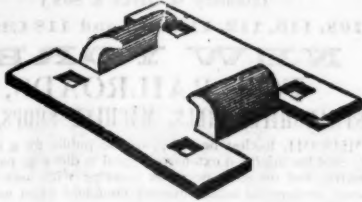
Address J. H. SCRANTON, President,
SCRANTON, PA.,
or THEO. STURGES, Treasurer,
46 Exchange Place,
NEW YORK.

**NEW YORK
RAILROAD CHAIR WORKS.****J. B. GREEN & CO., Proprietors.**

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late *New York Wrought Iron Railroad Chair Company*, and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our Chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Our manufacture of Chairs are used on a large number of Roads, of which the following list comprises some of them, viz

Galena and Chicago Union Railroad Company,
North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company.

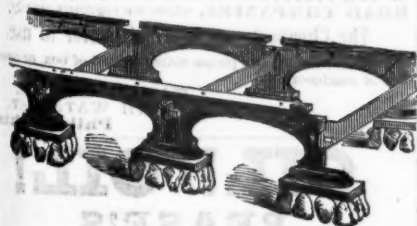
Messrs. **M. K. JESUP & CO.**, 44 Exchange Place, New York, are the only parties authorized to act as our Agents.

**BEERS'
CAST-IRON ENDLESS RAIL,
FOR CITY RAILROAD;**

Now being laid in Philadelphia and elsewhere;

THIS road is exclusively of cast iron, without tie, string-piece, or chair; Rail 85 to 100 lbs. per yard; Durability four fold over the present roads, with 65 lbs. groove rail: And with a saving on first cost; effecting a reduction in current yearly repairs, and relays, of at least \$1,000 per mile.

Also,

**BEERS'
ELASTIC IRON RAILWAY,
FOR LOCOMOTIVE USE;**

This road can be built and equipped, without additional cost over a road with 56 lbs. T rail; saving not less than 60 per cent. on motive power, 50 per cent. on dead weight, and 80 per cent. on repairs of way; thus reducing the yearly expenses from \$1,500, to \$2,000, per mile. For full particulars, with drawings, relating to both roads, see a recent Treatise, entitled *Railroads, their construction and management*, with the remedy, from twenty-five years experience, by **S. A. BEERS**, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

S. A. BEERS.**GEO. M. FREEMAN,**

SUCCESSOR TO

**PRATT & FREEMAN,
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RAILWAY SUPPLY AGENCY,
No. 123 WALNUT STREET,
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Railroad Materials, Locomotive and Car Findings,
MACHINERY AND MACHINISTS' TOOLS,
MINERS' TOOLS, ETC.

COTTON WASTE.
WHITE AND YELLOW CAR GREASE,
LOCOMOTIVE BRASS WORK,
Baggage Checks, Barrows, etc., etc.,

RAILROAD LANTERNS, SIGNAL LIGHTS,
STEAM GAUGES, COCKS AND WHISTLES,
INDIA RUBBER HOSE PACKINGS, ETC.
LANTERNS OF ALL DESCRIPTIONS,
ENGINE, STATION, AND SIGNAL BELLS,
Superior Car Upholstery, etc.

AGENCY OF THE KEROSENE OIL COMPANY.

Orders solicited, promptly filled, and forwarded with despatch and care at the manufacturers' lowest prices.

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Rails, Sleepers, Chairs, Spikes, Wheels, Axles and Tires.

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Locomotive, Hand and Ship Lanterns; Car Trimmings of all descriptions. Steam and Water Gauges; Signal Bells, etc., etc.

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Orders filled with despatch and at the lowest prices.

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ARE agents for, and prepared to furnish at manufacturers' prices,

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RAILROAD CARS,
CAR WHEELS,
AXLES, CHAIRS,
SPIKES, TOOLS,
ETC., ETC.**

All inquiries in reference to the above articles will receive immediate attention.
New York, January, 1859.

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**Iron Rails, Chairs, & Spikes,
FREIGHT AND COAL CARS,**

(on hand or made at short notice.)

Wheels and Axles of all kinds,

**LOWMOOR, AMES, BOWLING AND NASHUA TIRES,
IRON AND STEEL,**

Of all kinds for Shops and Tracks.

**Car Trimmings, Paints, Oil, Varnish, Car and Switch
Locks, Ventilators, Lanterns, Head-Lights, Gauges, Rubber
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LAWRENCE STONE & Co., do. **E. S. CHEBROUGH, Chicago.**
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OF EVERY DESCRIPTION,

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**RAILROAD AXLES, WHEELS AND CHAIRS,
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NUTS, WASHERS,**

CAR, SHIP AND BRIDGE BOLTS.

IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.

STEEL AND RUBBER SPRINGS,**LOCOMOTIVE AND HAND LANTERNS,****PORTABLE FORGES AND JACK SCREWS,****COTTON DUCK FOR CAR COVERS,****BRASS AND SILVER TRIMMINGS.**

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Orders for the purchase of goods on commission, aside from our regular business, respectfully solicited.

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AGENTS FOR THE SALE OF

FOREIGN AND AMERICAN RAILROAD IRON

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THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

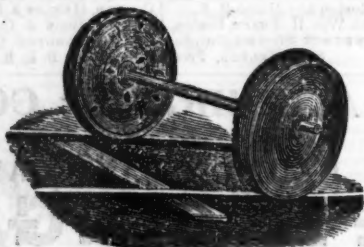
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New York, January 1, 1899.

Boston Locomotive Works,
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LOCOMOTIVE AND STATIONARY
STEAM ENGINES;
BOILERS;
Iron, Brass, Copper and Composition Castings;
COPPERSMITH'S WORK,
AND ALL KINDS OF RAILROAD MACHINERY
FURNISHED AT SHORT NOTICE.

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**VAN KURAN'S IMPROVED
RAILROAD WHEEL,**
PATENTED MAY 1, 1849.
Manufactured under the Personal Superintendence
of the PATENTEE, as above.



ORDERS for any quantity of Wheels executed with dispatch, and Wheels and Axles fitted in the very best manner, and at the lowest rates.

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**THE JERSEY CITY
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MANUFACTURE COAL or WOOD BURNING
LOCOMOTIVES, Steam Fire Engines,
Portable ENGINES and BOILERS, Cast Steel
SPRINGS for Engines, Tenders Passenger or Freight
Cars; SHAFTING and ALL KINDS OF RAIL-
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They also furnish to order TYRES, DRIVING WHEELS
and AXLES, CASTINGS and FORGINGS.

Boiler Work furnished with dispatch.

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Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials
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Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TYRES, equal
to any produced in the country.

WHEELS and AXLES fitted for use.
HYDRAULIC PRESSERS for expressing Oils and for
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MACHINERY of the most approved construction for Flour-
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GAS HOLDERS of any size, and Machinery and Castings
of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or
description. SHAFTING, PULLEYS and HANGERS.

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Locomotive & Machine
WORKS,**

SUCCESSORS TO

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PATERSON, N. J.,

HAVING extensive facilities, are now prepared to furnish
promptly of the best and most improved description, either

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AND OTHER VARIETIES OF

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WM. S. HUDSON, Supt. {

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HAVING erected an extensive Shop, with the most ap-
proved Machinery and Tools, are prepared to execute
orders for the various classes of Freight and Passenger Loco-
motive Engines and Tenders, in the best manner and on the
most favorable terms.

Also, Stationary Engines, and the various Tools suitable for
furnishing Repair Shops.

The business of Machine making, heretofore carried on by
Charles Danforth & Co., is continued by the present firm, and
all orders will receive prompt attention. 1849

**THE SCHENECTADY
LOCOMOTIVE WORKS,
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HAVING large facilities, are prepared to receive and ex-
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LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and
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BRASS and IRON CASTINGS; LOCOMOTIVE TYRES
welded and blocked to exact sizes, and every thing connected
with the building or repairing of Locomotives furnished on
short notice.

These Works being located on the New York Central Rail-
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for forwarding their work to any part of the country, without
delay.

JOHN ELLIS, Agent.

WALTER McQUEEN, Superintendent.

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RICHARD NORRIS & SON,**

LOCOMOTIVE STEAM ENGINE

BUILDERS,

SEVENTEENTH STREET, ABOVE CALLOWHILL,

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ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

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RAILWAY TOOLS AND

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MANUFACTURE to order, Locomotives of any Arrange-
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Workmanship, the Locomotives produced at these Works,
are equal to, and not excelled by any.

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R. P. PARROT, Lessee.

Manufacturer of Marine and Stationary

ENGINES,

Sugar Mills, Saw Mills, Iron Bridges, Cannon,
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REFINED NEAT'S FOOT OIL

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AND equal in every respect to the best SPERM OIL for all
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MANUFACTURED BY

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STEAMSHIPS, MILLS, MACHINE SHOPS, ETC.

THIS OIL having been before the public for a long time,
and having been extensively used in different parts of the
country, and on each occasion meeting with unqualified ap-
proval, renders the manufacturers confident when making the
following claims:—

1st. Its first cost is vastly less than that of any Oil in use,
of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any
journal or bearing, all the gum in the Oil being entirely decom-
posed.

3rd. It will keep all journals and bearings cool, clean
and bright as new, thus not only saving wear and tear, but
saving also no inconsiderable amount of motive
power.

4th. It is fully as durable as any Oil in the market, and
consumers are invited to make their experiments on such jour-
nals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all
odor or unpleasant smell.

Also,—

J. C. HULL & SONS'

REFINED BURNING OIL.

Buyers are requested to give this OIL a trial, as it is be-
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**CHEAPEST, CLEANEST AND BEST
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(all things considered), in the market.

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